

billy LAS VEGAS

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# avast! Enterprise Administration

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www.avast.com

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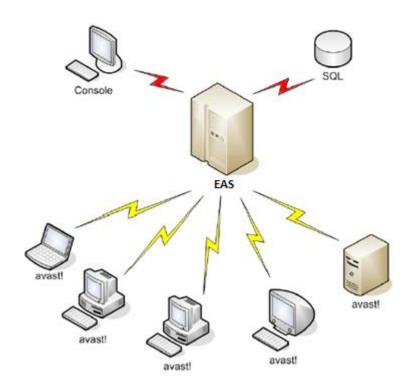
### INTRODUCTION TO AVAST! ENTERPRISE ADMINISTRATION

AEA

### **General information**

- avast! Enterprise administration (AEA) is a suite of powerful tools to help network administrators manage the avast! antivirus product line across their whole enterprise.
- The AEA system consists of the following components:
  - avast! Enterprise Server (AES)
    - the heart of AEA that provides the business logic for the whole system
  - SQL Database
    - serves as data storage for all policies, security settings and client information
  - Administration Console
    - the program interface which the administrator uses to manage the whole system
- These three components work together with the avast! antivirus products deployed on individual workstations and servers on the network to provide the best possible protection against malware and to minimize the effort needed to manage and monitor their current status.
- The brain of the whole system is the EAS (avast! Enterprise Server). This is Where all the hard work is done.

### **General information**



- The managed machines connect only to the EAS to download the latest policies and to report their status and scan results.
- The avast! Enterprise Administration Console also connects directly to the EAS.
- The EAS is based on an SQL Database either a dedicated MS SQL 2008 R2 if available, or for small and medium-size networks, on its lightweight version, SQL Server Express 2008 R2, which is included in the AEA installation package (alternatively, one can use the free version of SQL Server 2005,2008 "SQL Server 2005/2008 Express").
- It is assumed that the EAS machine can connect to the Internet via HTTP protocol.

### **General information**

- For larger networks, the EAS is expected to be installed on a dedicated computer.
- It is also possible to deploy multiple EAS's (each having its own database). These can then be instructed to replicate their databases (requires SQL with full text and replication support) on a regular basis, and also to upload all scanning results to a dedicated EAS on which enterprise-wide reporting can be carried out.
- The administrator can choose from two communication models used by the EAS and the clients: PUSH or POP.
  - The POP model is necessary for larger networks and for networks with roaming users. Each EAS can scale up to tens of thousands of client computers, provided they are all connected by a local area network.

### SYSTEM REQUIREMENTS

AEA

- **Microsoft Windows XP** (any Edition with the latest Service Pack 3)
- **Microsoft Windows Vista** (any Edition with the latest Service Pack, 32-bit or 64-bit, except Starter Edition)
- **Microsoft Windows 7** (any Edition with the latest Service Pack, 32-bit or 64-bit)
- Microsoft Windows Server 2003 (any Edition with the latest Service Pack, 32-bit or 64-bit, incl. Small Business Server)
- Microsoft Windows Server 2003 R2 (any Edition with latest Service Pack, 32-bit or 64-bit, incl. Small Business Server)
- Microsoft Windows Server 2008 (any Edition with latest Service Pack, 32-bit or 64-bit, incl. Small Business Server, except Server Core)
- Microsoft Windows Server 2008 R2 (any Edition with latest Service Pack, 32-bit or 64-bit, incl. Small Business Server, except Server Core)
- Microsoft Windows Small Business Server 2011
- Free Microsoft SQL Server 2008 R2 Express (supplied as an optionally installable component with avast! Enterprise Administration) or full Microsoft SQL Server 2008 R2 (required for the replication service to support multiple avast! Enterprise Administration Servers in very complex networks with more than 1000 computers and/or servers in any combination).

- Internet Explorer 6.x or higher.
- Internet connection (to download and register the product, and for updates of the Mirror from the AVAST update server).
- **Domain** network or **Windows workgroup** membership.
- Valid and reachable **SMTP** Server.
- Intel Pentium III compatible processor or above (depends on the requirements of the used operating system version and other 3rd party software installed).
- **512 MB RAM** or above (depends on the requirements of the used operating system version and other 3rd party software installed).
- **800 MB** of free hard disk space.
- Optimally standard screen resolution not less than **1024 x 768** pixels.
- Note:

avast! Enterprise Administration is not supported (is not compatible, cannot be installed and won't run) on DOS, Microsoft Windows 3.x, Microsoft Windows NT 3.x, Microsoft Windows NT 4.0, Microsoft Windows 95, Microsoft Windows 98, Microsoft Windows ME, Microsoft Windows 2000, or any other operating systems which aren't specified as supported.

#### • Administration Console:

- **Microsoft Windows XP** (any Edition with the latest Service Pack 3)
- Microsoft Windows Vista (any Edition with the latest Service Pack, 32-bit or 64-bit, except Starter Edition)
- Microsoft Windows 7 (any Edition with the latest Service Pack, 32-bit or 64-bit)
- Microsoft Windows Server 2003 (any Edition with the latest Service Pack, 32-bit or 64-bit, incl. Small Business Server)
- Microsoft Windows Server 2003 R2 (any Edition with latest Service Pack, 32-bit or 64-bit, incl. Small Business Server)
- Microsoft Windows Server 2008 (any Edition with latest Service Pack, 32-bit or 64-bit, incl. Small Business Server, except Server Core)
- Microsoft Windows Server 2008 R2 (any Edition with latest Service Pack, 32-bit or 64-bit, incl. Small Business Server, except Server Core)
- Microsoft Windows Small Business Server 2011
- 128MB recommended
- 250MB hard disk space
- Internet Explorer 6 or higher

#### Note: The Minimum Windows system requirements have to be met!

- Windows OS vs SQL compatibility
  - <u>www.microsoft.com</u>
  - <u>http://technet.microsoft.com</u> The TechNet Library contains technical documentation for IT professionals using Microsoft products, tools, and technologies.
- SQL full versions vs SQL Free/Express versions
  - <u>http://technet.microsoft.com</u> The TechNet Library contains technical documentation for IT professionals using Microsoft products, tools, and technologies.
  - <u>http://msdn.microsoft.com</u> MSDN Library, an essential source of information for developers using Microsoft<sup>®</sup> tools, products, technologies and services. The MSDN Library includes how-to and reference documentation, sample code, technical articles, and more.
- For help with installation, please refer to the Installation Guide for avast! Endpoint Protection (Plus) and avast! Endpoint Protection Suite (Plus).

## 

### EAS MAINTENANCE TOOL

EAS Mainten	ance Tool	
⊂ License Ma	anagement	
N	To view or change your avast! licensing info use this option.	rmation, please
		License
SSL Certifi	cate Management	
	With this option, you can manage (view and SSL certificate.	change) the EAS
		Certificate
Database	management	
	Using this option lets you restore the whole database from a previous backup.	Restore DB
	This button allows you to perform DB compatibility check.	Check DB
	With this option, you can delete the database(!).	Delete DB
	With this button you can recreate the database with defaults.	Crea <u>t</u> e DB
	Using this option, you can edit SQL connection details.	SQL Conn
to Cont	ate the program and/or change proxy server rol Panel -> Programs and Features -> avast tration -> Change/Remove.	
	Enterprise Administration Server, version 7.0. ht (c) 2004-2012 AVAST Software. All rights i	
Reset Pass	word	Close

- There are certain maintenance tasks that cannot be performed from the AEA console but instead must be done directly on the server. For most of these tasks, there's a special program called the "EAS Maintenance Tool."
- EAS maintenance tools can be started via the START menu:
  - -> Programs/All programs
  - -> avast! Enterprise Administration
  - -> EAS Maintenance

### To view or change your avast! license, click the License button.

License M	anagement	
$\mathbf{N}$	To view or change your avast! licensing info use this option.	rmation, please
1		License
SSL Certif	icate Management	
<b>≈</b> ≣	With this option, you can manage (view and SSL certificate.	change) the EAS
_		Certificate
Database	management	
	Using this option lets you restore the whole database from a previous backup.	Restore DB
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	Using this option, you can edit SQL connection details.	SQL Conn
to Cont	ate the program and/or change proxy server : rol Panel -> Programs and Features -> avast tration -> Change/Remove.	
	Enterprise Administration Server, version 7.0. ht (c) 2004-2012 AVAST Software. All rights r	
Reset <u>P</u> ass	word	Close

After the license file has been successfully uploaded, hit the yes button to restart the avast! Management service.

icense Manager					
Current license file: C:\Progra	m Files\AVAST \$	Software\E	nterprise Adminis	tration\DATA\lice	ense.dat
License info User: DEMO Company: DEMO			Customer num License issued		oftware a.s.
Lic <u>e</u> nsed products:					
Product	Туре	Count	Valid to	Update to	Issued
avast! Endpoint Protection Suite Plus	DEMO	200	-unlimited-	Jun 21, 2012	May 22, 2012
<b>☑</b> <u>C</u> opy t	he license file to	avast! fold	er		Load!
				ОК	Cancel
AmsTool				23	
avast! Enterprise Admin the changes to take effect. Do you want to restart t			eeds to be resta	arted for	

If the certificate needs to be replaced (corrupted/expired), hit the Certificate button.

AS Mainter	nance Tool	
-License Ma	anagement	
	To view or change your avast! licensing info use this option.	rmation, please
		License
SSL Certif	icate Management	
<u>∦≣</u>	With this option, you can manage (view and SSL certificate.	change) the EAS
		Certificate
Database	management	
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	Using this option, you can edit SQL connection details.	SQL Conn
to Cont	ate the program and/or change proxy server : rol Panel -> Programs and Features -> avast tration -> Change/Remove.	
	Enterprise Administration Server, version 7.0. ht (c) 2004-2012 AVAST Software. All rights r	
Reset <u>P</u> ass	word	Close

### To change/create the server SSL certificate see the steps below:

Cur	rent EAS Certificate	
1	Current Certificate In	fo
	Issued by: WIN7 Issued for: WIN7 Expires: 5/22/	,
_	Generate New	Import Close
	Generate New Self-Signed C	ertificate
	Please fill in the self-signed EA	he information to be included in the new S certificate.
	Full name of <u>E</u> AS:	WIN7.
	Certificate <u>v</u> alidity:	2 years  v 1 year
	The following items are option	2 years 3 years Nair
	Two-letter <u>c</u> ountry co	de:
	Company <u>n</u> ame:	
	Organizational unit:	
		Generate Cancel

EAS Maintenance Tool
License Management
To view or change your avast! licensing information, please use this option.
License
SSL Certificate Management
With this option, you can manage (view and change) the EAS SSL certificate.
<u>C</u> ertificate
Database management
Using this option lets you restore the whole <u>Restore DB</u> database from a previous backup.
This button allows you to perform DB Check DB
With this option, you can delete the <u>Delete DB</u>
With this button you can recreate the database with defaults.
Using this option, you can edit SQL <u>SQL Conn</u>
To update the program and/or change proxy server settings, please go to Control Panel -> Programs and Features -> avast! Enterprise Administration -> Change/Remove.
avast! Enterprise Administration Server, version 7.0. Copyright (c) 2004-2012 AVAST Software. All rights reserved.
Reset Password Close

- Restore DB
  - Restores the database from the backup. (Database backups can be done as a Database management task from the administration console, and can even be scheduled to run periodically.)

Note: restoring the database will delete its current contents. It's therefore a good idea to create a new, separate backup immediately before doing the restore.

- Check DB
  - Checks the validity of the database.
- Delete DB
  - Deletes and reinitializes the database.
     Note: by deleting or recreating the database, all its previous contents will be deleted. Be sure to create a backup before performing these operations.

License Management
To view or change your avast! licensing information, please use this option.
License
SSL Certificate Management
With this option, you can manage (view and change) the EAS SSL certificate.
Database management
Using this option lets you restore the whole <u>R</u> estore DB database from a previous backup.
This button allows you to perform DB Check DB
With this option, you can delete the database(!).
With this button you can recreate the database with defaults.
Using this option, you can edit SQL <u>SQL Conn</u>
To update the program and/or change proxy server settings, please go to Control Panel -> Programs and Features -> avast! Enterprise Administration -> Change/Remove.
avast! Enterprise Administration Server, version 7.0. Copyright (c) 2004-2012 AVAST Software. All rights reserved.
Reset Password Close

- Create DB
  - If the previous DB was deleted/corrupted you can create a new DB by clicking on the Create DB button.

EAS Maintenance Tool	
License Management To view or change y use this option.	your avast! licensing information, please
SQL Server Instance Settings	
<u>SQL</u> Server instance:	WIN7\SQLEXPRESS
Database:	avastent
Login:	sa
Password:	••••••
	Test connection
	OK Cancel
Using this option, yo connection details.	ou can edit SQL
	or change proxy server settings, please go s and Features -> avast! Enterprise emove.
avast! Enterprise Administra Copyright (c) 2004-2012 AV/	tion Server, version 7.0. AST Software. All rights reserved.
Reset Password	Close

- SQL Connection
  - here you can change the database connection details. Use this option when you want to move the database to another SQL server.
  - You should create a backup, change the database connection details, and then restore the database from the backup.
- Use a backslash when specifying the SQL instance name
  - For more details see the following article on the avast web site:
    - <u>https://support.avast.com/index.p</u>
       <u>hp?\_m=knowledgebase&\_a=viewa</u>
       <u>rticle&kbarticleid=1289</u>

### **AEA CONSOLE**

AEA

### Log On screen

**AEA** console

- After the console installation is complete, you can immediately start using the program. Go to the Start menu, and select AEA Console to start the console. The Log On window will open.
- Detect server
  - Type in the name of the machine on which you've installed the EAS, or press the Detect server button to try to discover all available EAS's on the network.
  - If the Detect servers feature does not work you can speficy the server manually:
    - DNS name
    - IP address
    - Localhost



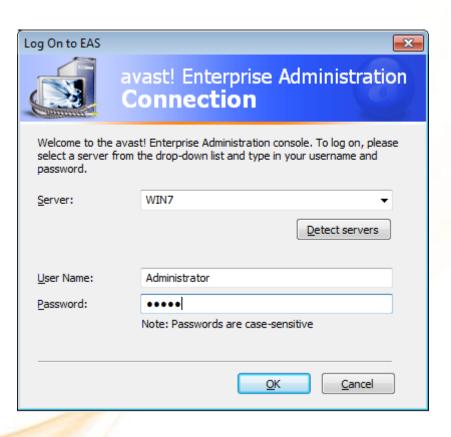
### Log On screen

**AEA** console

- User name
  - Do NOT localize the User name. It should be left as Administrator (not e.g. Administrador.)
- Password
  - Don't use Windows logon credentials to log in !

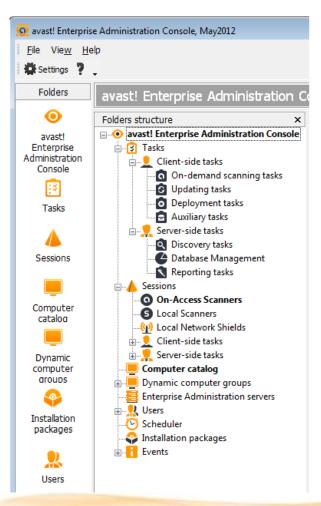
#### • Note:

- The default username is Administrator, and the password is admin. We strongly recommend changing the password as soon as possible after logging on to the server, as leaving the password set to its default value may compromise system security.
- To change the password, open the EAS maintenance tool and click Reset Password



### **OVERVIEW**

#### Overview



The AEA console is organized into folders (besides the main Toolbar) that act as containers for various administration objects. These are the most important AEA console objects:

#### Main toolbar

- Program settings
- EAS, mirror status, logs

#### Folder structure

- Tasks
  - Client-side tasks
  - Server-side tasks
- Sessions
- Computer catalog/groups
  - Computer/computer group settings
- Dynamic groups
- Alerts
- Installation packages
- Events

#### Overview

- Login
  - Allows you to log-in as another user (administrator) with different rights
- Logout
  - Current logged user will be automatically logged out.
- Subscribe to Root EAS
  - For more details see the next page
- Settings
  - For more details see the next page
- Local SSL Certificates
  - Opens the certificates management window which allows you to manage trusted EAS certificates
- Recreate default objects
- Close close the AEA console

<mark>i ()</mark> a	vast! Enterprise Administration Co	nsole, May2012
File	e View Help	
	Login Logout Subscribe to Root EAS	rise Administration Co
0	Settings Local SSL Certificates	x rise Administration Console
	Recreate Default Objects	·side tasks -demand scanning tasks
	Close Alt + F4 Tasks	dating tasks reployment tasks

Sub

#### Overview

#### Main toolbar settings

#### Subscribe to Root EAS

🧿 av	ast! Enterprise Administration Co	nsole, May2012
File	View Help	
	Login Logout Subscribe to Root EAS	rise Administration C
•	Settings Local SSL Certificates	x rise Administration Console
	Recreate Default Objects	·side tasks demand scanning tasks
	Close Alt + F4 Tasks	dating tasks reployment tasks

Connect to each child EAS, i.e., to each EAS except the one you chose as the root, and in the File menu, choose "Subscribe to Root EAS."

scribe	to Root EAS
	By subscribing to the root EAS, you create a replication relationship between this and the root server. That is, when the subscription is created, the contents of the two databases are synchronized.
	The synchronization is not performed automatically though - it is done using a replication task run on the root EAS.
	Please keep in mind that subscribing to the root EAS causes all data currently stored in the local database to be lost!
	This is because the local database needs to be replaced by the root EAS database for the replication to work.
	Don't show this message again

Continue

Cancel

#### Overview

#### Main toolbar settings

Subscrib	e to Root EAS		×
<u>&gt;</u>		rent server a second level EAS, yo root EAS. This can be done using t	
Root E	AS:		
EAS U	ser Name:		
Dacew	ord:		
<u>r</u> assw			
<u>-</u> assw		Note: Passwords are case-sensitiv	e
<u>r</u> assw		Note: Passwords are case-sensitiv Server Object Prop	-
- Fill in t	he details of this		erties –
Fill in t	he details of this	Server Object Prop server. The LAN and WAN address	erties –
Fill in t	he details of this : : the same if WAN · Object <u>N</u> ame :	Server Object Prop server. The LAN and WAN address I replication is not required.	erties –
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Fill in t can be Server C <u>o</u> mm	he details of this : : the same if WAN · Object <u>N</u> ame :	Server Object Prop server. The LAN and WAN address I replication is not required.	erties –
Fill in t can be Server C <u>o</u> mm	he details of this : : the same if WAN <sup>.</sup> Object <u>N</u> ame: ent:	Server Object Prop server. The LAN and WAN address N replication is not required. WIN7	erties –
Fill in t can be Server C <u>o</u> mm	he details of this the same if WAN Object <u>N</u> ame: ent: ddress:	Server Object Prop server. The LAN and WAN address I replication is not required. WIN7 10.0.2.15	erties

Root EAS

- type the address of the root EAS
- EAS User Name and Password
  - fill in the AEA credentials for the root EAS (using the Administrator account is recommended)
- Server Object Name and Comment
  - define how this child server will be presented in the AEA's "Management servers" folder
- LAN Address and WAN Address
  - should contain the IP address of this child EAS
  - the LAN address is typically NATed
  - the WAN address is the outside address

If outside access is not required, use the NATed address in both fields.

#### Overview

<mark>0</mark> a	🧿 avast! Enterprise Administration Console, May2012						
Fi	e V	/iew	Help				
	Lo	ogin					
Н	Lo	ogout				-	
Н	S	ubscrib	e to Root EAS	ise A	dministration	G	
	Se Se	ettings.		rise Adr	X		
	į	🕺 avast	t! settings				? 🗙
		Mir Mir	IL Server roring scellaneous	SQL S	erver		
			nfirmations nguage	<u>S</u> QL Se	rver instance:	WIN7\SQLEXPRESS	
			ITP	<u>D</u> ataba	ise:	avastent	
				Login:		sa	
				Passwo	ord:	•••••	
					Changes to these set ast! Management Ser	tings will take effect after restart of ver service.	
					<u>H</u> elp	ОК	ancel

- SQL Server settings
  - SQL server name and instance
  - DB name
  - Login/Password
- Mirroring settings
  - Auto sync
  - Mirror http port
  - Second level mirrors
- Miscellaneous
  - Mark engines as offline after..
  - Disconnect inactive user
  - Query limit (e.g. events)
  - Custom logo for reports
- Confirmations
  - Ask before session is deleted..
  - Ask before alert is deleted..
- Language
- SMTP
  - Management server SMTP settings

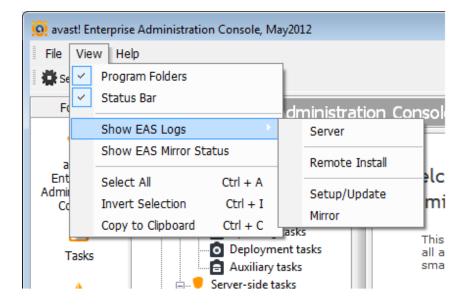
#### Overview

🥺 avast! Enterprise Administration Console, May2012							
Ī	File	View Help					
1		Login					
П		Logout	rice Administratio	n Concole			
Π		Subscribe to Root EAS	ise Administration Console				
	*	Settings	rise Administration				
	_	Local SSL Certificates	rise Administration	Welcome to the			
		Certificate Manager         You can use this tool to manage your avast! Enterprise Administration trusted certificates. Certificates are used by the SSL encryption layer, proving the identity of the avast! Management Server to the console.         Installed (trusted) certificates:					
	-						
		Issued To	Issued By	Expiration Date			
		WIN7	WIN7	5/22/2014			
			<u>A</u> dd	Remove Properties			

- Certificate manager
  - Here, AEA trusted certificates can be:
    - added
    - removed
    - modified
- Certificates are used by the SSL encryption layer, proving the identity of the avast! Enterprise Server to the AEA console.

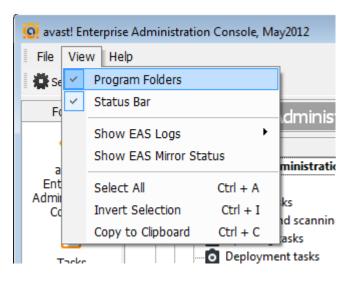
#### Overview

- Program folders
  - Allows you to close/open the Folder structure in the AEA console
  - Status bar
    - Allows you to close/open the status bar
  - Show EAS logs
    - All EAS logs can be displayed in the Internet browser, without accessing them manually.
  - Show EAS Mirror status
  - Select all
  - Invert selection
  - Copy to clipboard



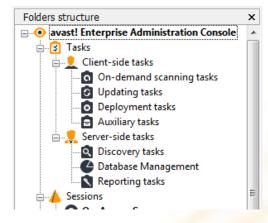
#### Overview

#### Main toolbar settings



#### • Program folders

Allows you to close/open the Folder structure in the AEA console

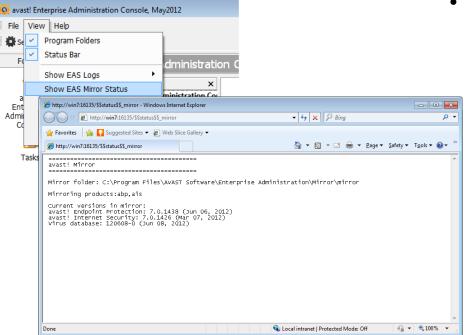


• Status bar

Allows you to close/open the status bar

Administrator 🗱 WIN7 🏶 May2012 (7.0.1)

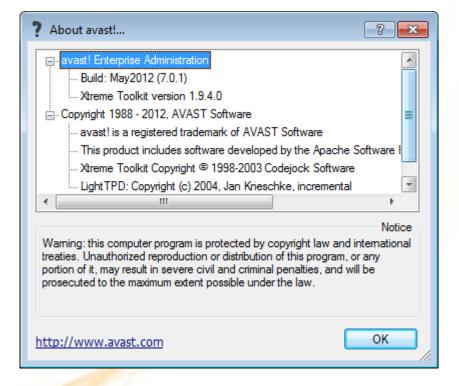
#### Overview



- Show EAS mirror status displays the following Information:
  - General information
    - Mirror installation folder
    - Mirrored products
  - Current versions of:
    - AEA
    - avast! managed client
    - VPS (virus database)

#### Overview

o avast! Enterprise Administration Console, May2012				
File View	Hel	p		_
Settings		Help		
Folders		Introductory Help		
Tolders		Support		.or
•		Registration		×
avast!		License Agreement		
Enterprise Administratio Console	?	About avast! Enterprise Administration		
		On-demand scanning tasks		



#### Overview

#### Main toolbar settings

💽 avast! Enterprise Administration Console, May2012				
File View He	elp			
Settings 🥊	💽 🖪 New 🔇 Edit 💼 🖪 🚬 🕒 Stop 🎔 🖪 🚬			
Customize	avast! Enterprise Administration Cons			
0	Customize toolbar Folders structure X			
avast!	avast! Enterprise Administration Console			

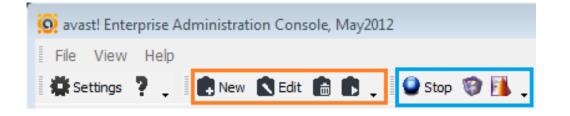
Customize	<b>—</b>
Tool <u>b</u> ars <u>C</u> ommands	
Toolb <u>a</u> rs: ♥ Enhanced UI toolbar ♥ Session toolbar ♥ Task toolbar	New Rename Delete
	Close

The Settings button will lead you to the avast! Settings. See page 29.

- By default only the Enhanced toolbar is ticked and displayed. Two additional toolbars can be added:
- 1. Session toolbar
- 2. Task toolbar

#### Overview

#### Main toolbar settings



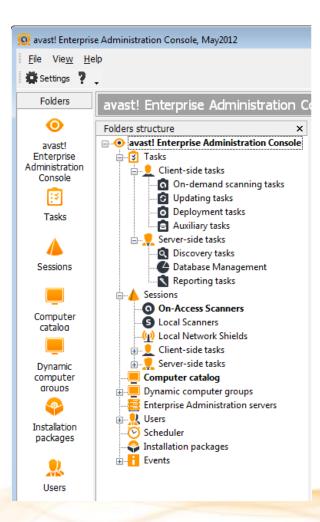
- Session toolbar
  - Allows you to:
    - Create a new task
    - Edit a created task
    - Delete a task
    - Run a selected task

### Task toolbar

- Allows you to:
  - Stop the current running session
  - Delete a session



## Tasks



A task is a definition of a job, i.e., a description of what to do and when. A task also has associated computers on which it should be run. There are many types of tasks in AEA, but the basic distinction is between Client side and Server-side tasks.

## Client-Side tasks

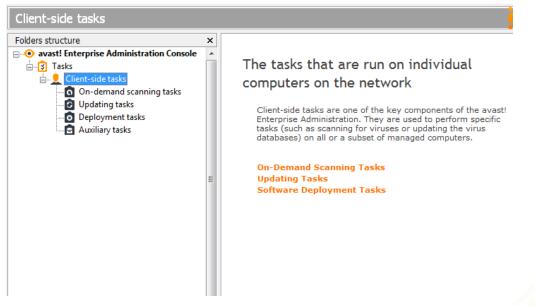
- can be remotely started/scheduled to run on the client computers (i.e. workstations, servers, etc. – the machines on which the avast! products are deployed).
  - On-demand scanning tasks
  - Updating tasks
  - Deployment tasks
  - Auxiliary tasks

## Server-side tasks

- such as reporting and database maintenance tasks, run on the EAS itself.
  - Discovery tasks
  - Database management
  - Reporting tasks

## **CLIENT-SIDE TASKS**

## Client-side tasks

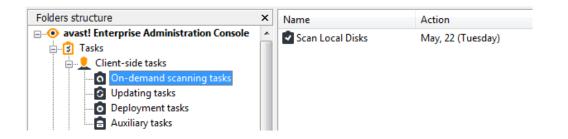


- Client-side tasks are one of the key components of the avast! Enterprise Administration. They are used to perform specific tasks (scanning for viruses, updating the virus database etc..) on all or on a subset of the managed computers.
- The tasks can either be run on-demand, or by creating a schedule. To run an on-demand task on a selected group of computers, you can drag'n'drop the task to a group in the Computer Catalog.

AEA Client-side tasks

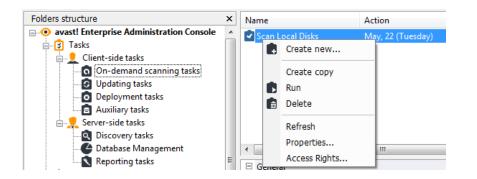
# **ON-DEMAND SCANNING TASKS**

### Client-side tasks



- AEA makes it easy to do on-demand virus scanning of client machines. The scanning job is defined by creating an On-demand scanning task.
- These tasks can be found in the folder of the same name, under the Client-side tasks folder.

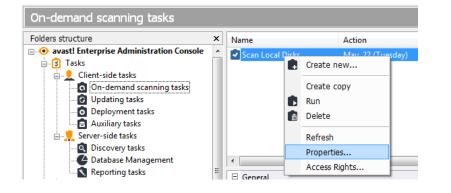
### Client-side tasks



- Create New
  - Allows you to create a new task.
- Delete
  - Deletes the selected task.
- Create copy
  - Creates a new task containing the same settings as the selected task. This new task will be shown in the task list and its name will begin with the word "Copy", e.g. "Copy of Scan: local disks". This option is useful if you want to change the settings of a predefined task (which cannot be changed in the original task).
- Run
  - Starts the selected task.
- Stop
  - Stops the selected running resident task.
- Properties
  - Allows you to edit the selected task.

### Client-side tasks

## On-demand scanning tasks



🧿 Task properties - "Scan	Local Disks"	? 💌
<ul> <li>Trask</li> <li>★ Execution</li> <li>↔ Areas</li> <li>♥ Types</li> <li>₩ Results</li> <li>✓ Sensitivity</li> </ul>	Task Scan Local Disks	Task name s
Sensitivity Exclusions Virus Packers Report file Computers Processing Scheduling	Scans all local d <u>T</u> ask Type:	lisks of all managed computers for viruses. Moves infected Scan for viruses
		Help OK Cancel

• To edit or define the scan settings, right click on the created scaning task and choose Properties.

- The task editor offers a large number of settings, which can be customized e.g.
  - Areas to scan
  - Scan sensitivity
  - Scan results to be posted to the EAS
  - Report file
  - Computer/s on which the task will be run

### Client-side tasks

🧕 Task properties - "Scan Lo	cal Disks"
Task	Execution
Areas Types Results Sensitivity Exclusions Virus Packers Report file Computers Processing	Select the type of execution:      Organ Regular scan (in the host OS)      User's ability to control the scan in progress can be configured in computer group properties ("Scan Control" page).      Organ Boot-time scan (requires client computer restart)
Scheduling	Help QK Cancel

- Here you can specify the type of scan to be created:
  - Regular scan
    - The user's ability to control the scan in progress can be configured in computer group properties (Scan Control page)
  - Boot-time scan (requires client computer restart)
    - The user can abort the scan
    - System files can be skipped

### **Client-side tasks**

🕺 Task properties - "Scan	Local Disks"
Task T Execution	Areas Select the areas to scan:
Types Results	Name III All harddisks
Exclusions     Exclusions     Virus     Packers     Report file	
Computers Processing Scheduling	< <u> </u>
	Browse Add Remove
	Local Hard Disks Diskette A:
	Help Disk C: All Diskettes
	CD-ROM, DVD All Media
	Memory Auto-Start Programs Auto-Start Programs (All Users)
	Interactive Selection Other

- Here you can choose the areas to scan. The default value is "Local hard disks". You can select additional areas, entire folders and/or individual files.
- "Browse" button.
  - An Explorer-like window will open; here you can select the areas to scan by checking the particular folders or files.
- "Add" button.
  - After clicking this button, a popup menu will appear with the following preset areas:
    - Local hard disks
    - Diskette A:
    - Disk C:
    - All Diskettes
    - CD-ROM and DVD
    - All Media
    - Memory
    - Auto-Start Programs
    - Auto-Start Programs (All Users)
    - Other
    - Interactive Selection
    - Other ..

### Client-side tasks

## On-demand scanning tasks

Task Execution	Areas
Areas	Select the areas to scan:
S Types Results	Name
Results Sensitivity	All harddisks
Exclusions	
Virus	
Packers Report file	
Report file     Computers	
Processing	
Scheduling	۰ III ا
	Browse Add Remove
	Local Hard Disks
	Diskette A:
	Help Disk C:
	All Diskettes
	CD-ROM, DVD
	All Media
	Memory
	Auto-Start Programs
	Auto-Start Programs (All Users)
	Interactive Selection
	Other

- Auto-Start Programs Checks startup items for the logged user
- Auto-Start Programs (All Users) -Checks startup items for all created users

## Interactive selection

 allows you to select the area to test each time you run the task

## • Other

 In this window, "<type area>" should be replaced with the actual path (e.g."C:/Windows/System/file.ex e").

### Client-side tasks

## On-demand scanning tasks

🧑 Task properties - "Scan Lo	ocal Disks"	? 💌
Task ✓ Execution ∰ Areas	<b>Types</b> Recognize file types by their	<ul> <li>content (thorough but slow)</li> </ul>
	riccognize nie types by their	○ name extension (fast)
Results Sensitivity Exclusions Virus Packers Report file Computers Processing Scheduling	C Scan all files	File content based scan
	<u>H</u> elp	QK <u>C</u> ancel

This page defines the type of files to be scanned by avast!

Recognize file types by their:

#### content

 File extensions will be ignored and the file types will be determined by their code (content).
 Because of the necessity to open each file and analyze its type, this is slower than recognizing file types by their extensions.

#### name extension

The type of the file is determined by its extension.
 This choice speeds up the virus scanning process.

If you select the option to determine the file type by its content, you will have only one additional option -Scan all files. It means that even files which usually do not contain viruses, e.g. text files or images, will be scanned.

### Client-side tasks

## On-demand scanning tasks

• If you select the option to determine the file type by the **name extension**, you will see a list of the extensions (types) to be scanned.

🧕 Task properties - "Scan Lo	ocal Disks"	? 🔀
<ul> <li>✓ Task</li> <li>✓ Execution</li> <li>         Areas     </li> <li>✓ Types</li> <li>✓ Results</li> <li>✓ Sensitivity</li> </ul>	Types Recognize file types by their	<ul> <li>◯ content (thorough but slow)</li> <li>◉ name extension (fast)</li> <li>Extension based scan</li> </ul>
<ul> <li>Exclusions</li> <li>Virus</li> <li>Packers</li> <li>Report file</li> <li>Computers</li> <li>Processing</li> <li>Scheduling</li> </ul>	Type Description	Add Browse Remove
	Scan default extensions	OK Cancel

#### Add

 Clicking this button enables you to add an extension to the list of those to be scanned. If it is a known extension, its description is shown (e.g. if you enter EXE, the description ("Application") automatically appears).

#### Browse

 Displays an alphabetical list of known extensions. You can select one or more of the corresponding file types (for multiple selections, use the CTRL and SHIFT keys).

#### Remove

- Removes the selected extension(s) from the list of the types to be scanned.
- The choice "Scan default extensions" adds all the "dangerous" extensions to the list above.

### Client-side tasks

## On-demand scanning tasks

Using various checkboxes, you can select which results are displayed and stored for later usage.

- Infected files
  - Information about files containing virus code.

#### Files with hard errors

 If a serious, unexpected error occurs during the scanning of the file (e.g. the diskette containing the file to be checked is unreadable), the filename will be displayed.

#### Files with soft errors

 Files that were impossible to check will be displayed. It is usually because of a sharing violation (some system files) or because access to the files was denied (e.g. the current user does not have access to the folder they reside in).

#### Files not tested by the scanner

 Skipped files (e.g. because of their size) will be displayed. (If the file is too small to contain any virus code, it will be skipped).

#### Files not tested due to exclusion settings

- Files skipped because of the current exclusion settings will be displayed.
- **OK** files
  - All files correctly tested (and found uninfected) will be displayed.

🕺 Task properties - "Scan Lo	ocal Disks"
<ul> <li>Task</li> <li>Execution</li> <li>Areas</li> <li>Types</li> <li>Results</li> <li>Sensitivity</li> <li>Exclusions</li> <li>Virus</li> <li>Packers</li> <li>Report file</li> <li>Computers</li> <li>Processing</li> <li>Scheduling</li> </ul>	Results Select the results you want to be stored by the task. The results will be saved to a database and will remain available for future processing (until you delete them). Type of results to store Infected files Files with hard errors Files with soft errors (e.g. sharing violation) Files not tested by the scanner Files not tested by the scanner Files not tested due to exclusions settings Files with no error (OK files)
	Help OK Cancel

### On-demand scanning tasks

🥺 Task properties - "Scan Lo	ical Disks"	? <mark>- × -</mark>
<ul> <li>✓ Task</li> <li>✓ Execution</li> <li>↔ Areas</li> <li>◇ Types</li> <li>➢ Results</li> <li>✓ Sensitivity</li> <li>⊗ Exclusions</li> <li>✓ Virus</li> <li>Packers</li> <li>Report file</li> <li>○ Computers</li> <li>Processing</li> <li>◇ Scheduling</li> </ul>	Sensitivity  Test whole files (may be very slow for big files)  Ignore virus targeting	
	Help OK	Cancel

#### Test whole files

 Specifies whether whole files will be tested for viruses, or only the parts most frequently affected by viruses. Most viruses appear either at the start of the file, or they are appended to the end. If this option is selected avast! will test the whole file. Naturally, it will slow down the scanning a bit.

#### Ignore virus targeting

 If this option is selected avast will check the files against all the viruses in its database. Without this option, the files are tested only against those viruses that affect the given type of file. It means that avast! will not look for viruses only infecting EXE files in a file with a .COM extension.

### Client-side tasks

### Client-side tasks

### On-demand scanning tasks

<ul> <li>Task properties - "Scan Lo</li> <li>Task</li> <li>Task</li> <li>Execution</li> <li>Areas</li> <li>Types</li> <li>Results</li> <li>Sensitivity</li> <li>Exclusions</li> <li>Virus</li> </ul>	Enter the paths to be excluded from scanning. You may use wildcards.	]
Packers Report file Computers Processing Scheduling	Browse  Browse  Help OK Cancel	]

avast! makes it possible to exclude some areas, or even single files, from testing; it means that avast! will not search there for viruses. This can be useful in several cases:

- Avoiding false alarms. If avast! reports a virus infection in a file but you are sure that it is a false alarm, you can exclude the file from testing and avoid further false alarms.
- Speeding up the processing. If you have a directory on your hard disk that contains images only, for example, you can exclude it from testing by adding it to the exclusions list, and thus reduce the time spent on scanning the files.

#### Add

 Adds an empty item to the list where you can then enter the folder or file to be excluded. If you want to select a folder including all its subfolders, it is necessary to append "\\*", e.g. "C:\Windows\\*".

#### Remove

Removes the selected folder or file from the exclusions list.

#### Browse

 An Explorer-like window will open; here you can select the desired folder or file, without having to type the whole path.

### Client-side tasks

- On this page, you can specify what actions will be taken if the task finds a virus. The default setting is "choose action". You can define more than one action, using the operators "...and..." and "...if failed, then...".
- When using "...and..." avast will apply all the selected actions, in the given order (left to right).
- When using "...if failed, then...". avast! will try to take the first action listed; if it is successful, all the others are ignored. However, if the action failed, avast! will try to perform the next action(s).

a Task properties - "Scan	Local Disks"	<u>? ×</u>
Task Areas Types Results Sensitivity Exclusions	Virus Select actions to be performed when a virus is found move to chest if failed delete file	•
Virus     Packers     Packers     Computers     Alerts     Processing	Move/Rename         Move to Chest           Delete         Interactive         Stop	s –
2 Scheduling	Processing operators And If failed Remove last word	
	Help <u>QK</u> <u>Cancel</u>	

### Client-side tasks

On-demand	l scanning	tasks
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<ul> <li>Q. Task properties - "Scan I</li> <li>Task</li> <li>✓ Execution</li> <li>         Areas         Types         Results         ✓ Sensitivity     </li> </ul>	Virus Select actions to be performed when a virus is found <u>move to chest</u> if failed <u>delete file</u>	-?×-
<ul> <li>Exclusions</li> <li>Virus</li> <li>Packers</li> <li>Report file</li> <li>Computers</li> <li>Processing</li> </ul>	Repair Move/Rename Delete Interactive	Virus actions Move to Chest Stop
Scheduling	And If failed	Remove last word

#### Choose action

- When a virus is found, the task is temporarily stopped and a window appears where you can choose the action to take. To select this option, click the "Interactive" button.
- Repair
  - avast! will try to repair the infected file. After selecting this option, a window is displayed describing the principle for repairing files. In this window, you can choose whether all macros should be removed from Word 6 documents; macros are removed automatically from Word 6 documents if a virus, or potential virus is identified.
  - Macros will also be automatically removed from Word97, Excel95 and Excel97 documents if a virus or potential virus is detected. In the case of an infected executable file, avast! will try to remove it according to the information stored in the Virus Recovery Database. Files with no records in the Virus Recovery Database cannot be repaired! In the case of a boot virus, avast! will overwrite the diskette boot sector, thus eliminating the virus.

### **Client-side tasks**

k Execution	Virus		
Areas	Select actions to be perfe	ormed when a virus is found	I
Types	move to chest if failed	<u>delete file</u>	
ults			
sitivity			
usions	1		Virus actions
			virus actions
ers	Repair	Move/Rename	Move to Chest
t file	Delete	La la construcción de la constru	
uters ssing	Delete	Interactive	Stop
duling	Pro	cessing operators	
, downig			(
	And	If failed	Remove last word

### On-demand scanning tasks

- Move/Rename
  - Moves or renames an infected file. You can specify the folder to move the file to.

#### Move to Chest

– An infected file will be moved to the virus Chest.

#### • Delete

- Deletes the infected file. Additional options can be selected. The default setting is delete file(s) permanently, which means the file will be completely removed from your computer (hard disk, diskette, ...) For this option, you can further specify that the file will be deleted upon OS restart if it is currently locked.
- This is a very useful setting, as it is impossible to immediately delete the file of a virus that is currently running. So, avast! will "remember" which file the virus is in and delete it as soon as possible, which is normally at the next operating system start (i.e. before the virus is activated again). The option delete file(s) to the recycle bin ensures that the file will not be physically removed, but only moved to the recycle bin.
- Stop
  - When the first virus is detected, the task is stopped; no action will be taken with the virus.

### **Client-side tasks**

🧿 Task properties - "Scan L	ocal Disks"
Task	Packers
Areas Types	Select the packer formats to be extracted while scanning All packers
Results Sensitivity Exclusions Virus Packers Report file	<ul> <li>Self-extracting DOS executables</li> <li>Self-extracting Win32 executables</li> <li>Droppers</li> <li>7ZIP archive</li> <li>ACE archive</li> <li>ARC archive</li> <li>ARL archive</li> </ul>
Computers Processing Scheduling	BZIP2 archive     Packer description     DOS Executable files may be packed into self-extracting files. Select     this checkbox to scan the unpacked content of these files.
	Help OK Cancel

- This page allows you to select which packers (archives) avast! will test during the task processing. The default setting is selfextracting executables only. You can set additional archives to be processed, though it will slow down the test, of course. If "All packers" is checked, avast! will scan all archives that it is able to process.
- avast! is able to process the following archives:
- Self-extracting DOS executables
- Self-extracting Win32 executables (UPX, ASPack, PECompact, ...)
- 7ZIP archive
- ACE archive
- ARC archive
- ARJ archive
- BZIP2 archive
- CAB archive
- CHM archive
- CPIO archive
- DBX archive
- GZIP archive
- Installer archives (Wise, ...)
  - ...) TNEF streams
    - ZIP archive
    - ZOO archive

- ISO archive
- LHA archive
- MAPI files (\*.pst)
- MIME
- NTFS streams
- OLE archive (DOC, XLS, MSI, ...)
- RAR archive
- RPM archive
- SIS archive
- TAR archive

### Client-side tasks

## On-demand scanning tasks

 avast! can create and save a report file containing information about a past scan. It contains the same information as in the scan results.

#### Report File Folder

Enter the path and name of the report file, e.g.
 C:\Reports\task\_name.rpt. The folder can be selected by clicking the Browse button. The default report file name is the name of the corresponding task.

#### Log Record For

- Check the items that should be written to the report.
   Task start writes the task start date and time to the report; similarly, task stop writes the task end date and time. The remaining items hard errors, soft errors, skipped files, infected files, and OK files are described on the results page.
- Type of file
  - Select the format of the report file. You can choose either a simple text file, or the newer XML format.

🧕 Task properties - "Scan Lo	cal Disks"
<ul> <li>Task</li> <li>✓ Execution</li> <li>← Areas</li> <li>✓ Types</li> <li>✓ Results</li> <li>✓ Sensitivity</li> <li>⊗ Exclusions</li> <li>✓ Virus</li> <li>Packers</li> <li>⊂ Report file</li> <li>⊂ Computers</li> <li>↓ Processing</li> <li>⊗ Scheduling</li> </ul>	Report file         Use the controls below to generate a report of the scan result, and to specify the content of the report.         File name         Image: Plain text (ANSI)         Plain text (Unicode)         XML         If file exists         Append         Overwrite
	Help OK Cancel

### Client-side tasks

🧕 Task properties - "Scan	Local Disks"
<ul> <li>Task</li> <li>✓ Execution</li> <li>Areas</li> <li>Types</li> <li>Results</li> <li>Sensitivity</li> <li>Exclusions</li> <li>Virus</li> <li>Packers</li> <li>Report file</li> <li>Computers</li> <li>Processing</li> <li>Scheduling</li> </ul>	Computers
	Computers Enter wildcard masks for computer names to run the task on.
	(Computers with Agent) Browse
	Enter wildcard masks for computer names to exclude. Browse
	Separate values by semicolons. Put (static) computer groups in brackets, dynamic groups in parentheses.
	Help OK Cancel

- On this screen you can specify the computers on which the task should be run, or which should be excluded.
- You can also specify computers in groups.
  - Static groups should be enclosed in square brackets
    - e.g., [MyGroupName].
  - Dynamic groups should be enclosed in regular brackets
    - e.g., (Computers with Agent)
    - e.g., (Computers without Agent)

## Client-side tasks

## On-demand scanning tasks

🧿 Task properties - "Scan Lo	ocal Disks"		? <mark>- x -</mark> )
Task Execution Areas	Processing		
Types	Task session expiration (in minutes):	1440	
Results	Max. concurrent push jobs:	50	
Exclusions Virus	Push lags (in seconds):	60	
Packers Report file			
Computers			
Scheduling			
	Help Of	Can	cel

## Task session expiration

- The maximum period of time for which AEA will run a specific session (the time from when the task started). When the time limit is reached, the session will be terminated.
- The default time limit is 1440 minutes

## • Max.concurrent push jobs

- The maximum number of threads which the server creates to contact/establish a connection with computers on the network on which the task should be run.
- The default maximum number of concurrent jobs is 50
- Push lags
  - The time lag between push jobs to prevent network overload.
  - The default is 60 seconds

### Client-side tasks

Task Y Execution H Areas	Scheduling This task is scheduled by the following sched	duler events
S Types Results	Scheduler events	Add
Sensitivity		Modify
<ul> <li>Exclusions</li> <li>Virus</li> <li>Packers</li> <li>Report file</li> <li>Computers</li> <li>Processing</li> <li>Scheduling</li> </ul>		Delete

- avast! makes it possible to schedule tasks to start automatically at a given time and on a given date.
- Add
  - Adds a new scheduler event, i.e. it schedules a task startup.
- Modify
  - Modifies the selected scheduled event.
- Delete
  - Deletes the selected event.
- If you want specify a date/time for a task to be started, select Add. A new window will appear ->

## Client-side tasks

Schedule Prope	rties	<b>×</b>
		Scheduler event
<u>N</u> ame:	Unnamed	
Description:		
Dis <u>a</u> bled		
	art the task if i	running on batteries
Terminate	the task if ba	ttery mode begins
		Scheduled task
Scan Local D	isks	•
		EAS to schedule the task on
Server		•
		Scheduled time
Sch	eduling type:	once
	Launch time:	15 : 7
Launch da	ate: 5	June 🔻 2012
	Time is	s in military (0:00-23:59) format.
		OK <u>C</u> ancel

## On-demand scanning tasks

- -> here you should enter the parameters defining the new task
  - Name
    - Name of the task, e.g. "Weekend scan".
  - Description
    - Enter a brief description of the task e.g. "Scans all the hard disks every Sunday night".
- Disabled

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 This option disables the scheduled task. It is useful when you need to stop the task from running, but you do not want to delete the task completely and have to re-enter it again later.

#### Do not start the task if running on batteries

- Useful mainly for notebook owners. The task will not be started if the computer is running on batteries.
- Terminate the task if battery mode begins
  - If, while a scheduled task is running, the computer is cut off from the electric power supply and switches to batteries, the task will be terminated. Again, this is useful mainly for notebook owners.

#### Scheduled task

- Select the task to be scheduled.
- Scheduling type
  - Here you can specify when the task will be started.
    - Once you simply enter the time and date when the task should be run
    - Daily enter the time only the task will be started each day at the given time.
    - Weekly (or monthly)

#### Launch time/launch date

 Here you can set the time and the actual day of the week (month) when the scheduled task should be run.

AEA Client-side tasks

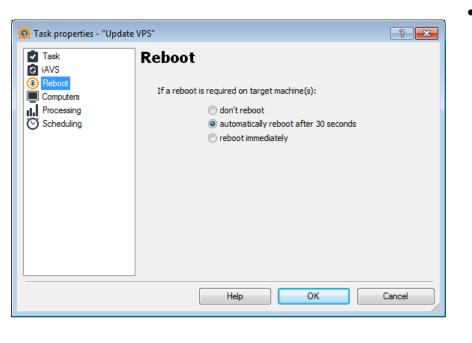
## **UPDATING TASK**

## **Client-side tasks**

Folders structure	× Name		Action
Client-side tasks	1 Upda	te VPS	May, 22 (Tuesday)
🗖 Deployment tasks 🧕 🧕 Task pro	perties - "Upda	ite VPS"	2 ×
	Task properties	Task Type: s - "Update VPS" IAVS	es the part of the program you want to be updated by the task. What to update
			Help OK Cancel

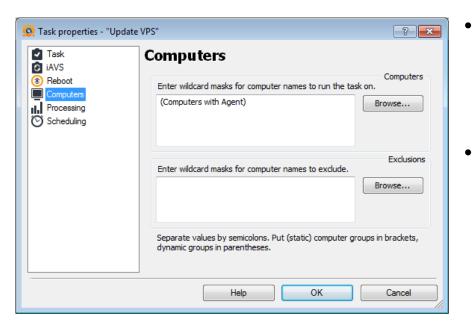
- To ensure the maximum possible virus protection, it is necessary to have the most up-to-date virus database (VPS file) and the latest program version.
- The AEA system offers very flexible options for update management, for distributing both virus database and full (program) updates.
- AEA uses "updating mirrors" to provide efficient updating mechanisms to all machines on the network (even those not directly connected to the Internet).
- Mirrors also save greatly on bandwidth requirements, because instead of downloading the updates to each and every machine on the network, AEA downloads the updates only to the mirrors and then distributes the updates locally.
- By default, there is a mirror on the EAS itself, and it is the only mirror on the network. If using multiple EAS's, there's a mirror on each EAS by default, and these are the only mirrors on the network. All managed machines download updates from the EAS mirror on the EAS, if a connection to the EAS is available.

## Client-side tasks



- On this screen you can select whether and when the system is restarted, where a reboot is required to complete the update.
  - Don't reboot
  - Automatically reboot after 30 seconds
  - Reboot immediately

## Client-side tasks



- On this screen you can specify the computers on which the task should be run, or which should be excluded.
- You can also specify computers in groups.
  - Static groups should be enclosed in square brackets
    - e.g., [MyGroupName].
  - Dynamic groups should be enclosed in regular brackets
    - e.g., (Computers with Agent)
    - e.g., (Computers without Agent)

## **Client-side tasks**

🧕 Task properties - "Update	VPS"	? 💌
<ul> <li>✔ Task</li> <li>ᢙ iAVS</li> <li>分 Reboot</li> </ul>	Processing	
	Task session expiration (in minutes):	1440
Constant Scheduling	Max. concurrent push jobs:	50
	Push lags (in seconds):	60
	Help OF	Cancel

- Task session expiration
  - The maximum period of time for which AEA will run a specific session (the time from when the task started). When the time limit is reached, the session will be terminated.
  - The default time limit is 1440 minutes
- Max.concurrent push jobs
  - The maximum number of threads which the server creates to contact/establish a connection with computers on the network on which the task should be run.
  - The default maximum number of concurrent jobs is 50
- Push lags
  - The time lag between push jobs to prevent network overload.
  - The default is 60 seconds

## Client-side tasks

🧕 Task properties - "Update	VPS"	? <b>~</b>			
<ul> <li>✔ Task</li> <li>② iAVS</li> <li>③ Reboot</li> </ul>	Scheduling This task is scheduled by the following scheduler events				
Computers	Scheduler events	Add			
Scheduling		Modify			
		Delete			
	HelpOK	Cancel			

- avast! makes it possible to schedule tasks to start automatically at a given time and on a given date.
- Add
  - Adds a new scheduled task, i.e. it schedules when a task will be run.
- Modify
  - Modifies the selected scheduled task.
- Delete
  - Deletes the selected task.
- If you want a task to be started at a certain time on a given date, select
   Add. A new window will appear ->

## Client-side tasks

## Updating task

Schedule Proper	ties		<b>-X</b> -
			Scheduler event
<u>N</u> ame:	Unnamed		
Description:			
Dis <u>a</u> bled			
📃 Do not <u>s</u> ta	rt the task if r	unning on batt	eries
Terminate	the task if bat	ttery mode beg	ins
			Scheduled task
Scan Local Di	sks		•
		EAS to sche	dule the task on
Server			
Server			
			Scheduled time
Sch	eduling type:	once	•
	Launch time:	15 : 7	
Launch da	te: 5	June	▼ 2012
	Time is	in military (0:0	0-23:59) format.
		ОК	<u>C</u> ancel

 here you should enter the parameters defining the new task

- Name
  - Name of the task, e.g. "Weekend scan".
- Description
  - Enter a brief description of the task e.g. "Scans all the hard disks every Sunday night".
- Disabled
  - This option disables the scheduled task. It is useful when you need to stop the task from running, but you do not want to delete the task completely and have to re-enter it again later.
- Do not start the task if running on batteries
  - Useful mainly for notebook owners. The task will not be started if the computer is running on batteries.
- Terminate the task if battery mode begins
  - If, while a scheduled task is running, the computer is cut off from the electric power supply and switches to batteries, the task will be terminated. Again, this is useful mainly for notebook owners.
- Scheduled task
  - Select the task to be scheduled.
- Scheduling type
  - Here you can specify when the task will be started.
    - Once you simply enter the time and date when the task should be run.
    - Daily enter the time only the task will be started each day at the given time.
    - Weekly (or monthly)

#### • Launch time/launch date

- Here you can set the time and the actual day of the week (month) when the scheduled task should be run.

AEA Client-side tasks

## **DEPLOYMENT TASK**

## **Client-side tasks**

## Deployment task

O avast! Enterprise	e Administration Console, May2012 sks Help					
	New 🕄 Edit 🍙 🖪 🗸					
Folders	Deployment tasks					0
ovast! Enterprise	Folders structure	×	Name		Action May, 22 (Tuesday)	
Administration Console	Updating tasks Deployment tasks	🧭 Task properti	ies - "1"	Task		? 💌
Tasks	Server-side tasks	<ul> <li>Install</li> <li>(€) Reboot</li> <li>(↓) Login Account</li> </ul>	unts	1		Task name
Sessions	Reporting tasks	Computers				Comment
Computer	Local Scanners 	Scheduling Task Chaini	ng			
cataloo	in			Task Type:	Deploy managed product(s)	
Dynamic computer aroups	⊕ □ Dynamic computer groups     ☐ Enterprise Administration s     ⊕					
Installation packages 💌	Scheduler     Scheduler     Installation packages     Events				HelpOK	Cancel
packages 📩					Help OK	

- After the installation package is created, you need to create a deployment task and bind the installation package to it.
- Make sure to correctly specify valid credentials for all domains/workgroups to ensure the software can be installed on all machines on the network.
- Also make sure that the **Discovery task** to build the **Computer catalog** was successfully created.
- Another source from where you can get a list of client computers on the network is **Dynamic computer group.**

## **Client-side tasks**

## Deployment task

🧕 Task properties - "1"	? <b>*</b>
<ul> <li>Task</li> <li>Install</li> <li>Reboot</li> <li>Login Accounts</li> <li>Computers</li> <li>EAS</li> <li>Processing</li> <li>Scheduling</li> <li>Task Chaining</li> </ul>	Installation package: 1 • Deploy the installation package to the remote machines • Just generate setup package (don't deploy anything) Setup path: C:\Program Files\AVAST Software\Enterprise Adminis
	Help OK Cancel

- There are five ways of deploying the avast! product line on the network:
  - By using the AEA Deployment task to push the installation to the clients automatically. Please note that this only works for Windows 2003/2008/XP/Vista/7 machines.
  - By using a log-on script or an alternative approach to execute the (unattended) installation on the target machines.
  - By using setup packages.
  - By disk imaging (cloning) methods.
  - By manually executing the installation program on the target machines and completing the setup wizard.

## **Client-side tasks**

## Deployment task

🧕 Task properties - "1"		2 💌
<ul> <li>Task</li> <li>Install</li> <li>Reboot</li> <li>Login Accounts</li> <li>Computers</li> <li>EAS</li> <li>Processing</li> <li>Scheduling</li> <li>Task Chaining</li> </ul>	<ul> <li>Just generate se</li> </ul>	e: 1
		Help OK Cancel

- If you choose to deploy avast! using "setup packages", you first need to create the package. This is done by creating a deployment task, but choosing the "Just generate setup package.." option.
- In this mode, the computers specified on the Computers page are ignored, as no deployment is taking place.
- Running the task will create a selfextracting \*.exe file only.
  - The default setup package file location is C:\Program Files\AVAST Software\Enterprise Administration\Deploy\Unnamed.exe
  - Note: if a file name is not specified for the setup package, the installation package will not be created!

### **Client-side tasks**



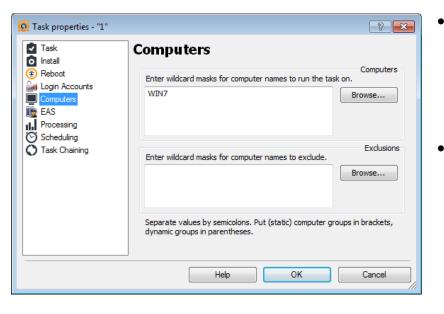
- On this page you can customize whether and when a client computer is restarted, where this is required to complete the update.
  - Don't reboot
  - Automatically reboot after 30 seconds
  - Reboot immediately

### **Client-side tasks**

Task properties - Task Task Install	"1"	Lo	ogin A	ccount	s		? ×
<ul> <li>Reboot</li> <li>Login Accounts</li> <li>Computers</li> </ul>		v	Please enter the credentials to be used to log on to individual domains, workgroups and computers to install the products into. The installer will fail without this information.				
EAS			Domain		Account		Add
Processing Scheduling			DomainNam	e	DomainName\User	Name	Delete
🔿 Task Chaining	Edit Cre	dent	tials		×		
	<u>D</u> omain	/Wor	rkgroup:	DomainName	2		Edit
	<u>A</u> ccoun	t:		DomainName	e (UserName		Move Up
	<u>P</u> asswo	ord:		•••••			Move Down
	be in th specifie Use * a	ie DC d in 1 is doi	MAIN\User the Domain/ main name if		apply the		Cancel
				<u>0</u> K	<u>C</u> ancel		

- Here, you should specify all domain/username/password assignments that will be used when logging on to the remote machines and pushing the packages.
- If the machines are not part of a domain, use the domain field to specify the workgroup name.
- Note:
  - When specifying the domain account use the format: DomainName\AdministratorAccount
  - If you are not sure about the Domain or Workgroup, or the deployment does not work, you can use the wildcard domain name \*

### **Client-side tasks**



- On this page you can specify the computers on which this task should be run, or which should be excluded.
- You can also specify computers in groups.
  - Static groups should be closed in square brackets
    - e.g., [MyGroupName].
  - Dynamic groups should be enclosed in regular brackets
    - e.g., (Computers with Agent)
    - e.g., (Computers without Agent)

### Client-side tasks

🧿 Task properties - "1"	? <mark>- ×</mark>
<ul> <li>Task</li> <li>Install</li> <li>Reboot</li> <li>Login Accounts</li> <li>Computers</li> <li>EAS</li> <li>Processing</li> <li>Scheduling</li> <li>Task Chaining</li> </ul>	EAS Please use this configuration page to set the management server (EAS) to run this task on. This is only necessary if you are running avast! Enterprise Administration in multi-EAS mode. "Server" is the name of the Root EAS. EAS to run this task on: Server
	Help OK Cancel

- The following configuration page can be used to select the Enterprise server (EAS) to run this task on. This is only necessary if you are running AEA in multi EAS mode.
- The server is the name of the Root EAS

### **Client-side tasks**

🥺 Task properties - "1"		[	? 💌
<ul> <li>✔ Task</li> <li>Install</li> <li>③ Reboot</li> </ul>	Processing		
Login Accounts Computers	Task session expiration (in minutes):	1440	
EAS	Max. concurrent push jobs:	50	
III       Processing         Scheduling       Scheduling         Task Chaining       Task Chaining	Push lags (in seconds):	60	
	Help Of	Car	ncel

- Task session expiration
  - The maximum period of time for which AEA will run a specific session (the time from when the task started). When the time limit is reached, the session will be terminated.
  - The default time limit is 1440 minutes
- Max.concurrent push jobs
  - The maximum number of threads which the server creates to contact/establish a connection with computers on the network on which the task should be run.
  - The default maximum number of concurrent jobs is 50
- Push lags
  - The time lag between push jobs to prevent network overload.
  - The default is 60 seconds

### **Client-side tasks**

🧿 Task properties - "1"		? 💌
Task Install Reboot	Scheduling This task is scheduled by the following scheduler e	events
Login Accounts Computers	Scheduler events	Add
in EAS		Modify
EAS     Processing     Scheduling     Task Chaining		Delete
	Help OK	Cancel

- avast! makes it possible to schedule a task to start automatically on a given date and at a given time.
- Add
  - Adds a new scheduled task, i.e. it schedules a task to start automatically.
- Modify
  - Modifies the selected scheduled task.
- Delete
  - Deletes the selected task.
- If you want a task to be started on a given date and at a given time, select
   Add. A new window will appear ->

## Client-side tasks

## Deployment task

Schedule Prope	rties		<b>—</b>
		Sche	eduler event
Name:	Unnamed		
Description:			
Disabled			
	art the task if r	unning on batteries	;
Terminate	the task if ba	ttery mode begins	
		Sch	neduled task
Scan Local D	isks		•
		EAS to schedule	the task on
Server			- une task off
berver			
		Sch	neduled time
Sch	eduling type:	once	•
	Launch time:	15 : 7	
Launch da	ite: 5	June 🔻	2012
	Time is	s in military <mark>(</mark> 0:00-23	3:59) format.
		ОК	<u>C</u> ancel

- here you should enter the parameters defining the new task
  - Name
    - Name of the task, e.g. "Weekend scan".
- Description
  - Enter a brief description of the task e.g. "Scans all the hard disks every Sunday night".
- Disabled
  - This option disables the scheduled task. It is useful when you need to stop the task from running, but you do not want to delete the task completely and have to re-enter it again later.
- Do not start the task if running on batteries
  - Useful mainly for notebook owners. The task will not be started if the computer is running on batteries.
  - Terminate the task if battery mode begins
    - If, while a scheduled task is running, the computer is cut off from the electric power supply and switches to batteries, the task will be terminated. Again, this is useful mainly for notebook owners.

#### Scheduled task

- Select the task to be scheduled.
- Scheduling type
  - Here you can specify when the task will be started.
    - Once you simply enter the time and date when the task should be run.
    - Daily enter the time only the task will be started each day at the given time.
    - Weekly (or monthly)

#### Launch time/launch date

- Here you can set the time and the actual day of the week (month) when the scheduled task should be run.

### Client-side tasks

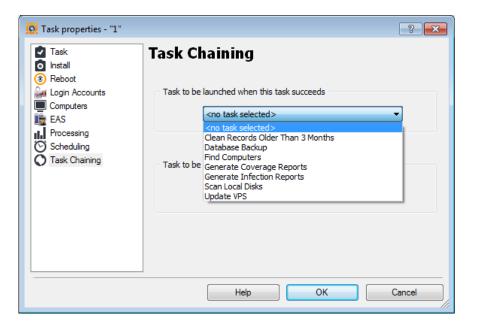
## Deployment task

Here you can choose the task which will be launched if the deployment task is successful.

The list of the tasks is displayed below:

Here you can choose the task which will be launched if the deployment task fails.

The list of the tasks is displayed below:

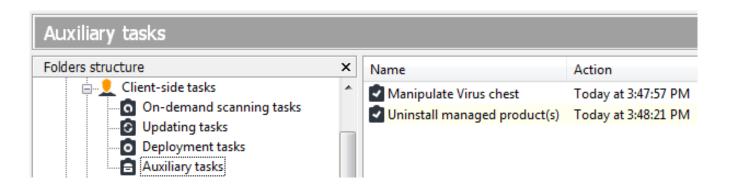


🧿 Task properties - "1"	? <mark>×</mark>
Task Install Reboot Login Accounts	Task Chaining Task to be launched when this task succeeds
Computers EAS Processing Scheduling Task Chaining	<no selected="" task=""></no>
	<no selected="" task=""> <no selected="" task=""> Clean Records Older Than 3 Months Database Backup Find Computers Generate Coverage Reports Generate Infection Reports Scan Local Disks Update VPS</no></no>
	Help OK Cancel

AEA Client-side tasks

## **AUXILIARY TASKS**

### Client-side tasks



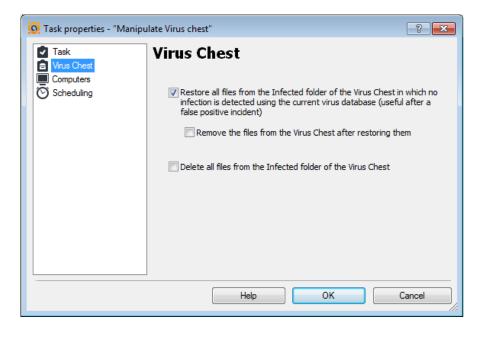
- Auxiliary tasks can be used to create and manage all available tasks, but mainly they are used to cover:
  - Virus chest tasks
  - Uninstallation tasks

### Client-side tasks

🧕 Task properties - "Manipul	ate Virus chest"		? 💌
Task Virus Chest	Task		
Computers	[		Task name
Scheduling	Manipulate Viru	s chest	
			Comment
	Task Type:	Manipulate Virus chest	
		ъ	
		Help OK	Cancel

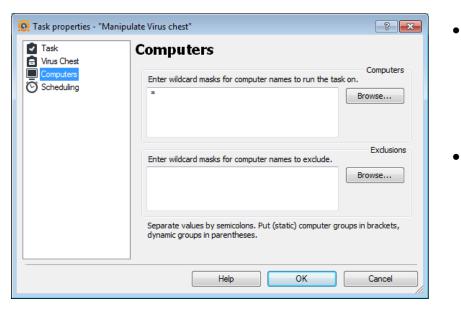
- The "Manipulate virus chest" task allows you (remotely) to :
  - Restore..
  - Remove..
  - Delete..
  - .. files in the virus chest
- Choose the computer to run the task on
- Schedule one task or task chain

### Client-side tasks



- Restore all files from the infected folder of the virus chest, in which no infection is detected using the current VPS (useful after a false positive alert)
  - Remove the files from the virus chest after restoring them
- Delete all files in the infected folder of the virus chest

### **Client-side tasks**



- On this page you can specify the computers on which this task should be run, or which should be excluded.
- You can also specify computers in groups.
  - Static groups should be closed in square brackets
    - e.g., [MyGroupName].
  - Dynamic groups should be enclosed in regular brackets
    - e.g., (Computers with Agent)
    - e.g., (Computers without Agent)

## Client-side tasks

## Auxiliary task

🧿 Task properties - "Man	ipulate Virus chest"	? 💌			
Task	Scheduling This task is scheduled by the following scheduler events				
Scheduling	Scheduler events	Add			
		Modify			
		Delete			
	Help	OK Cancel			
		h			

- avast! makes it possible to schedule a task to start automatically on a given date and at a given time.
  - Add

•

•

- Adds a new scheduled task, i.e. it schedules a task to start automatically.
- Modify
  - Modifies the selected scheduled task.
  - Delete
    - Deletes the selected task.
- If you want a task to be started on a given date and at a given time, select Add. A new window will appear ->

## **Client-side tasks**

## Auxiliary task

Schedule Proper	ties		<b>—</b> ×
			Scheduler event –
Name:	Unnamed		
Description:			
Dis <u>a</u> bled			
		unning on batt	
Terminate	the task if bat	ttery mode beg	ins
			Scheduled task
Scan Local Di	sks		•
		EAS to sche	edule the task on
Server			•
			Scheduled time
Sch	eduling type:	once	•
	Launch time:	15 : 7	
Launch da	te: 5	June	▼ 2012
	Time is	in military (0:0	0-23:59) format.
		ОК	<u>C</u> ancel

here you should enter the parameters defining the new task

- Name
  - Name of the task, e.g. "Weekend scan".
- Description
  - Enter a brief description of the task e.g. "Scans all the hard disks every Sunday night".
- Disabled
  - This option disables the scheduled task. It is useful when you need to stop the task from running, but you do not want to delete the task completely and have to re-enter it again later.
- Do not start the task if running on batteries
  - Useful mainly for notebook owners. The task will not be started if the computer is running on batteries.
- Terminate the task if battery mode begins
  - If, while a scheduled task is running, the computer is cut off from the electric power supply and switches to batteries, the task will be terminated. Again, this is useful mainly for notebook owners.
- Scheduled task
  - Select the task to be scheduled.
- Scheduling type
  - Here you can specify when the task will be started.
    - Once you simply enter the time and date when the task should be run.
    - Daily enter the time only the task will be started each day at the given time.
    - Weekly (or monthly)
- Launch time/launch date
  - Here you can set the time and the actual day of the week (month) when the scheduled task should be run.

Client-side tasks/Auxiliary task

# UNINSTALL MANAGED PRODUCT(s)

### **Client-side tasks**

## Auxiliary task

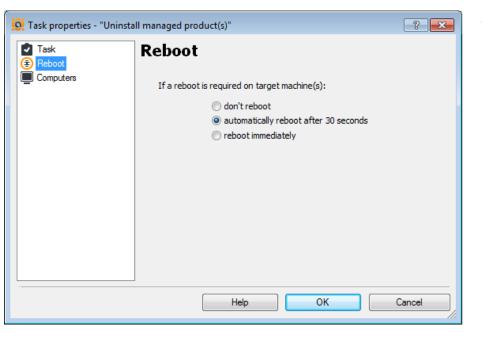
Task properties - "Uni Task Reboot	nstall managed produce Task	ct(s)"	? ×
Computers	Uninstall mana	ged product(s)	Task name
			Comment
	Task Type:	Uninstall managed product(s)	~
		Help OK	Cancel

- Every good program comes with an uninstallation program, and AEA is no exception.
- The uninstallation task can be also be found in the Deployment Tasks folder, in the console
- The uninstallation task uninstalls all avast! managed products from the selected computers.
- The task can be scheduled to run on all managed computers, or on just some of them.
  - Note:

•

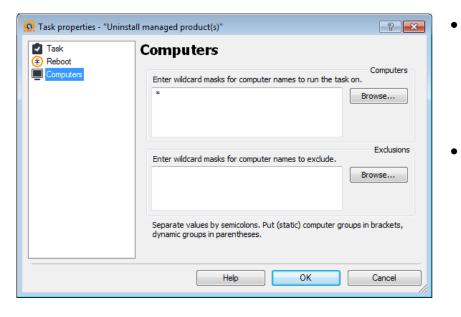
 Sometimes the uninstallation task in the console stays in the "Running" state even if it has already completed, that is, even after the software has been removed from the client machines. This is because the agent is removed as part of the uninstallation process, and therefore it fails to report the final status of the operation to the EAS.

### Client-side tasks



- On this page you can customize the way the program handles the situation where a reboot of a client computer is required to complete the update.
  - Don't reboot
  - Automatically reboot after 30 seconds
  - Reboot immediately

### **Client-side tasks**



- On this page you can specify the computers that this task should run on or should be excluded from.
- You can also specify computers in groups.
  - Static groups should be closed in square brackets
    - e.g., [MyGroupName].
  - Dynamic groups should be enclosed in regular brackets
    - e.g., (Computers with Agent)
    - e.g., (Computers without Agent)

## **SERVER-SIDE TASKS**

#### Server-side tasks



- Server-side tasks can be used for multiple purposes. These include management of the Computer Catalog, reporting tasks and database maintenance (backup, replication and cleanup).
- The tasks can either be run on-demand, or by creating a schedule. It is recommended to create a schedule for the most common tasks, such as reporting and DB backup.

AEA server-side tasks

## **DISCOVERY TASKS**

### Server-side tasks

## **Discovery tasks**

🧕 Task properties - "Find Com	puters"	? 💌
Task     Detection (Basic)     Detection (Advanced)     EAS     Processing	Task Find Computers	Task name
Scheduling		Comment
Task Chaining	Finds all computer	s on the network and inserts them to the Computer Cat
		Help OK <u>C</u> ancel

- Using a Discovery Task is probably the easiest and most convenient way to build the Computer Catalog. To use it, go to Tasks/Server-side tasks/Discovery tasks and create a new task.
- Normally, you can leave all the boxes set to their default values. Then run the task by double-clicking it. This will create a new session object for that task, as usual.
- The task queries the ActiveDirectory and/or the NT LAN Manager to find all the computers on the network and adds them to the Computer Catalog group, either to the root or to the individual folders created to reflect the organization's domain/workgroup structure.
- Since a discovery task typically runs for quite a while, you'll have to wait for it to complete. You can monitor its current status by looking at the session properties.
- Note:
  - the view is not automatically refreshed. To see the progress, you need to keep refreshing it manually by pressing F5.
- After the task completes, the Computer Catalog should be populated with all the computers that have been found. Don't forget to refresh the view to see all the new items.
  - Note:
    - In some cases you will have to close the AEA console and start it up again to see the GUI refreshed.

### Server-side tasks

## Discovery tasks

O Task properties - "Find C Task Detection (Basic)	omputers" 🔹 💽
Detection (Advanced)     EAS     Processing     Scheduling     Task Chaining	Detection method      © <u>U</u> se NT LAN Manager to detect the machines      O Use <u>A</u> ctiveDirectory to detect the machines (requires Win2000 or later)
	Image: Target         Image: Create domain related groups during computer discovery         Image: Put all computers to a designated group         Image: Target group:         Image: Croot
	Help <u>Q</u> K <u>C</u> ancel

Detection methods

- Use NT LAN manager to detect the machines
- Use Active directory to detect the machines (requires Win2003 or later)

• Target groups

- Create domain related groups during computer discovery
- Put all computers into a designed group (custom created groups under Computer catalog)

### Server-side tasks

## Discovery tasks

🚫 Task properties - "Find Co	omputers"
Task Detection (Basic)	Detection (Advanced)
EAS Processing Scheduling Task Chaining	Scope
	IP Addresses          IP Iry to detect IP addresses (might be slow)         Include hosts with unresolvable IP addresses
	Help OK Cancel

#### Scope

- Detect all machines on the network
- Detect machines in selected domains/workgroups only

### • IP addresses

- Try to detect IP addresses
  - Include hosts with unresolved IP addresses

### Server-side tasks

## Discovery tasks

🧕 Task properties - "Find Co	mputers"		? 💌
<ul> <li>Task</li> <li>Detection (Basic)</li> <li>Detection (Advanced)</li> <li>AS</li> <li>Processing</li> <li>Scheduling</li> <li>Task Chaining</li> </ul>	run this task on. This is only nece	ge to set the management server (E essary if you are running avast! Ent . "Server" is the name of the Root E Server	erprise
	Help		cel

- The following configuration page can be used to select the Enterprise Server (EAS) on which to run this task. This is only necessary if you are running AEA in multi EAS mode.
- The server is the name of the Root EAS

### Server-side tasks

## **Discovery tasks**

🧕 Task properties - "Find Computers"			
Task Detection (Basic)	Processing		
EAS Processing	Task session expiration (in minutes):	1440	
Scheduling	Max. <u>c</u> oncurrent push jobs:	50	
Task Chaining	Push lags (in seconds):	60	
	<u>H</u> elp <u>O</u> K	<u>C</u> ancel	

- Task session expiration
  - The maximum period of time for which AEA will run a specific session (the time from when the task started). When the time limit is reached, the session will be terminated.
  - The default time limit is 1440 minutes
- Max.concurrent push jobs
  - The maximum number of threads which the server creates to contact/establish a connection with computers on the network on which the task should be run.
  - The default maximum number of concurrent jobs is 50
- Push lags
  - The time lag between push jobs to prevent network overload.
  - The default is 60 seconds

## Server-side tasks

## Discovery tasks

🥺 Task properties - "Find Computers"			
Task C Detection (Basic) Detection (Advanced)	Scheduling This task is scheduled by the following scheduler eve	ents	
EAS	Scheduler events	<u>A</u> dd	
Processing     Scheduling     Task Chaining	Daily Schedule: Find New Computers	Modify	
		Delete	
	Help OK	<u>C</u> ancel	

 avast! makes it possible to schedule a task to start automatically on a given date and at a given time.

### • Add

- Adds a new scheduled task, i.e. it schedules a task to start automatically.
- Modify
  - Modifies the selected scheduled task.
- Delete
  - Deletes the selected task.
- If you want a task to be started on a given date and at a given time, select
   Add. A new window will appear ->

## **Client-side tasks**

## Discovery tasks

Schedule Proper	ties		<b>—</b> ×
			Scheduler event -
<u>N</u> ame:	Unnamed		
Description:			
Dis <u>a</u> bled			
📃 Do not <u>s</u> ta	rt the task if r	unning on batt	teries
Terminate	the task if ba	ttery mode beg	gins
			Scheduled task
Scan Local Di	sks		•
		EAS to sch	edule the task on
Server			•
			Scheduled time
Sch	eduling type:	once	•
	Launch time:	15 : 7	-
Launch da	te: 5	June	▼ 2012
	Time is	; in military (0:(	00-23:59) format.
		ОК	<u>C</u> ancel

- here you should enter the parameters defining the new task
  - Name
    - Name of the task, e.g. "Weekend scan".
  - Description
    - Enter a brief description of the task e.g. "Scans all the hard disks every Sunday night".
  - Disabled
    - This option disables the scheduled task. It is useful when you need to stop the task from running, but you do not want to delete the task completely and have to re-enter it again later.
  - Do not start the task if running on batteries
    - Useful mainly for notebook owners. The task will not be started if the computer is running on batteries.
- Terminate the task if battery mode begins
  - If, while a scheduled task is running, the computer is cut off from the electric power supply and switches to batteries, the task will be terminated. Again, this is useful mainly for notebook owners.
  - Scheduled task

٠

- Select the task to be scheduled.
- Scheduling type
  - Here you can specify when the task will be started.
    - Once you simply enter the time and date when the task should be run.
    - Daily enter the time only the task will be started each day at the given time.
    - Weekly (or monthly)
- Launch time/launch date
  - Here you can set the time and the actual day of the week (month) when the scheduled task should be run.

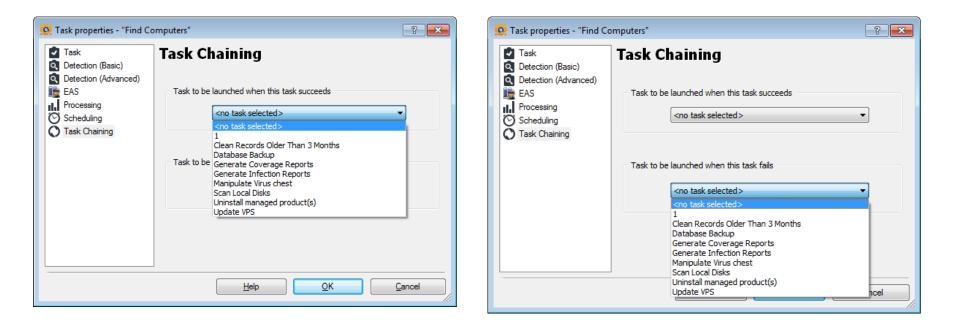
### Client-side tasks

## **Discovery tasks**

Here you can choose the task which will be launched if the deployment task is successful.

The list of the tasks is displayed below:

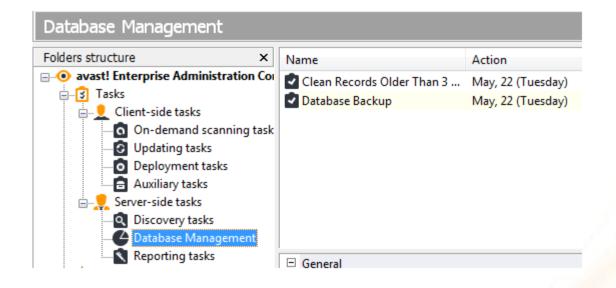
Here you can choose the task which will be launched if the deployment task fails. The list of the tasks is displayed below:



AEA server-side tasks

## DATABASE MANAGEMENT

### Server-side tasks



- Database management allows the Administrator to run the most important tasks related to the SQL DB maintenance, such as database cleanup, backup and database replication.
- All neccessarry basic and advanced settings may be modified via task properties, such as full DB backup, delete events, sessions, computers.. Followed by task scheduling or/and task chaining features.

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### Server-side tasks

🧕 Task properties - "Databas	e Backup"		? 💌	
Task DB Backup B Cleanup	Task		Task name	
EAS	Database Backup			
O Task Chaining	Backs up the entire database		Comment	
	Task Type: Database	management	<b></b>	
🙍 Task propert	es - "Database Backup"		?	x
<ul> <li>Task</li> <li>DB Backup</li> <li>DB Ceanup</li> <li>EAS</li> <li>Scheduling</li> <li>Task Chain</li> </ul>	<u>F</u> ull database     %AVASTPA			
		Help QK	<u>C</u> ancel	

- As AEA is based on a SQL database, it requires frequent maintenance. For these purposes, there's a special type of serverside task in AEA—the DB maintenance tasks.
- With a DB Maintenance task, you can do the following:
  - Perform a backup of the database.
  - Perform a database cleanup
  - Scheduling regular backups of the whole database is important. You should incorporate backup of the AEA database into your overall network backup strategy. There are two recommended ways:
    - You can use your backup software to back up the SQL server directly (if the program can do so; consult your backup software documentation for details).
    - Or you can use an AEA DB Maintenance task to back up the database to a file and then back up that file using standard methods.

#### Server-side tasks

😥 Task properties - "Database Backup"			
<ul> <li>Task</li> <li>DB Backup</li> <li>DB Cleanup</li> </ul>	DB Cleanup		
EAS	Delete events older than 31 days		
Task Chaining	Delete gessions older than 31 days		
	Delete computers that haven't communicated for more than		
	90 days		
	Delete computers that never communicated and are older than 90 days		
	30 0005		
	Cleanup the database from orphaned records		
	Shrink the database		
	Help OK Cancel		

- Database cleanup can be used to remove older records from the database.
- DB cleanup keeps the database from growing indefinitely. The DB Maintenance task also lets you delete "orphaned" records, which will also reduce the size of the database.
- You can specify the oldest records you'd like to keep. Of course, once you delete the old records, you can no longer generate reports from their data, so you must decide in advance how much data you need.

### Server-side tasks

🧕 Task properties - "Databa	se Backup"	×
<ul> <li>Task</li> <li>DB Backup</li> <li>DB Cleanup</li> </ul>	DB Cleanup	
EAS	Delete events older than 31 days	
Scheduling Task Chaining	Delete sessions older than 31 days	
	Delete computers that haven't communicated for more than	
	90 days Delete computers that never communicated and are older than 90 days	
	Cleanup the database from orphaned records	
	Shrink the database	
	Help <u>O</u> K <u>C</u> ancel	

- Delete events older than
   XX days
- Delete sessions older than
   XX days
- Delete computers that haven't communicated for more than
  - XX days
- Delete computers that have never communicated and are older than
  - XX days
- Cleanup the database from orphaned records

#### Server-side tasks

🧕 Task properties – "Database Backup"			
Task DB Backup DB Cleanup EAS Scheduling Task Chaining	EAS Please use this configuration page to set the management server (EAS) to run this task on. This is only necessary if you are running avast! Enterprise Administration in multi-EAS mode. "Server" is the name of the Root EAS.		
	EAS to run this task on:	Server	
	Help	<u>O</u> K <u>Cancel</u>	

- The following configuration page can be used to select the Enterprise Server (EAS) on which to run this task. This is only necessary if you are running AEA in multi EAS mode.
- The server is the name of the Root EAS

### Server-side tasks

🧕 Task properties - "Databa	ise Backup"	? 💌				
<ul> <li>Task</li> <li>DB Backup</li> <li>DB Cleanup</li> </ul>	Scheduling This task is scheduled by the following scheduler events					
EAS	Scheduler events	<u>A</u> dd				
Scheduling Task Chaining	Weekly Schedule: DB Backup	Modify				
		Delete				
	Help QK	<u>C</u> ancel				

### Database management

 avast! makes it possible to schedule a task to start automatically on a given date and at a given time.

#### • Add

Adds a new scheduled task, i.e. it schedules a task to start automatically.

### Modify

- Modifies the selected scheduled task.
- Delete
  - Deletes the selected task.
- If you want a task to be started on a given date and at a given time, select
   Add. A new window will appear ->

### Client-side tasks

### Database management

Schedule Proper	ties		<b>—</b> ×
			Scheduler event –
<u>N</u> ame:	Unnamed		
Description:			
Dis <u>a</u> bled			
📃 Do not <u>s</u> ta	rt the task if r	unning on batt	eries
Terminate	the task if bat	ttery mode beg	ins
			Scheduled task
Scan Local Di	sks		•
		EAS to sche	edule the task on
Server			•
			Scheduled time
Sch	eduling type:	once	•
	Launch time:	15 : 7	
Launch da	te: 5	June	▼ 2012
	Time is	in military (0:0	0-23:59) format.
		ОК	<u>C</u> ancel

- here you should enter the parameters defining the new task
  - Name
    - Name of the task, e.g. "Weekend scan".
  - Description
    - Enter a brief description of the task e.g. "Scans all the hard disks every Sunday night".
  - Disabled
    - This option disables the scheduled task. It is useful when you need to stop the task from running, but you do not want to delete the task completely and have to re-enter it again later.
  - Do not start the task if running on batteries
    - Useful mainly for notebook owners. The task will not be started if the computer is running on batteries.
- Terminate the task if battery mode begins
  - If, while a scheduled task is running, the computer is cut off from the electric power supply and switches to batteries, the task will be terminated. Again, this is useful mainly for notebook owners.
- Scheduled task
  - Select the task to be scheduled.
- Scheduling type
  - Here you can specify when the task will be started.
    - Once you simply enter the time and date when the task should be run.
    - Daily enter the time only the task will be started each day at the given time.
    - Weekly (or monthly)

#### Launch time/launch date

- Here you can set the time and the actual day of the week (month) when the scheduled task should be run.

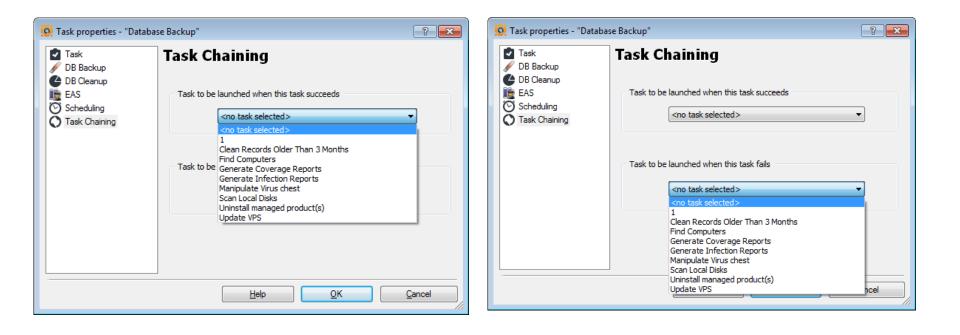
### **Client-side tasks**

### Database management

Here you can choose the task which will be launched if the deployment task is successful.

The list of the tasks is displayed below:

Here you can choose the task which will be launched if the deployment task fails. The list of the tasks is displayed below:

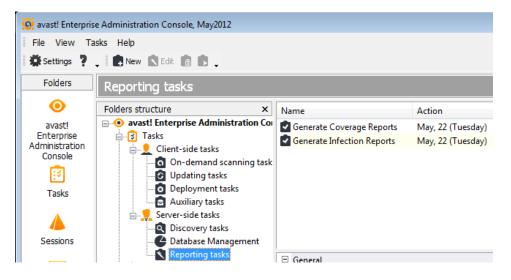


AEA server-side tasks

## **REPORTING TASKS**

#### Server-side tasks

### Reporting tasks



- AEA features powerful reporting capabilities second to no competing product. You can create a variety of useful reports from information collected by the EAS from the clients.
- You can export these reports in many popular formats. You can even have the reports sent to the management team automatically in periodic intervals.
- Reporting in AEA is generated, as is almost everything else, by certain tasks. Reporting tasks are grouped in a special folder in the console, under the Server-side tasks category.
- AEA comes with about twenty predefined reports

Server-side tasks

### Reporting tasks

Export targets include files (possibly on network

- Reports can be generated directly and saved in the task session, to be viewed and/or printed from the console via the integrated report viewer.
- Or they can be exported outside the database.

🚫 New task - "Unnamed"			? 💌	shares) and e-mail.
Task Destination Reports EAS Scheduling	Task Unnamed		Task name	Exports formats include PDF, HTML, DOC and XLS.
Task Chaining	Ţask Type:	Generate reports	<ul> <li>New task - "Unnamed"</li> <li>Task</li> <li>Destination</li> <li>Reports</li> <li>EAS</li> <li>Scheduling</li> <li>Task Chaining</li> </ul>	Please choose the type of report generation.         Generate report(s)         The reports will be placed to the task session.         Segnerate and export report(s)         Export to PDF         Saye report file(s) to:         Append date to the file name(s)         Segnarate e-mail addresses by a semicolon. SMTP server details must be set first in the management server settings.         Report(s) language:       English
			· · · · · · · · · · · · · · · · · · ·	Help QK Cancel

### Server-side tasks

### Reporting tasks

🧕 New task - "Unnamed"			? 🗙
Task	Reports		
Reports	Network machines summary		<u> </u>
EAS	Network machines summary	-	=
Scheduling Task Chaining	Network machines summary Network machines according		
	Network machines according		
	Top N viruses		-
	•		4
	Sort by computer name	Number of records to sh	now:
	Sort <u>a</u> scending	Virus name mask:	
	Show <u>d</u> etails	Computer name <u>m</u> ask:	*
	Include machines <u>w</u> /o avast!	Group name mask:	*
		Rep	ort time span
	1		
	<u>H</u> elp	<u>о</u> к	Cancel
			///

- Available predefined reports:
- Network Machines Summary
  - This report lists all computers on the network.
    - The form gives a summary of each computer which group it's in, what operating system it runs, and which managed products are installed. It also contains additional, detailed information about every computer on the network.
- Note:
  - this form of the Network Machines Summary can be very large. You'll usually want to reduce its size by applying filters. The filtering options are a group name mask and a computer name mask, sorted in ascending or descending order.

Server-side tasks

### Reporting tasks

#### Network Machines Summary by avast! Installations

- This report creates a summary of all computers on the network with special regard to whether they have the managed version of avast! installed.
- This report can also be generated in either a short, summarized form or a complete form that has detailed information about each computer.
- The settings of this report are the same as for the previous one. It includes a pie chart from which the administrator can easily find out which computers have avast! installed and which do not.

### Network Machines Summary by avast! Version

- This creates an easy to read report (with a pie chart and a table view) that shows all versions of avast! installed on the computers on the network.
- The report can include machines without avast! installed, so it can also be used to check the overall status of antivirus protection on the network.

Server-side tasks

### Reporting tasks

- Network Machines Summary by VPS Version
  - This report is like the previous one, except that, instead of the avast! version, it provides the version of the virus database (the VPS file) on each computer.
  - It can include computers that do not have avast! installed and can filter machines by computer or domain masks.

- Network Machines Summary by Last Communication
  - This is a tabular presentation of all network machines sorted by the last time they reported their status to the EAS. It's useful for discovering communication problems as well as finding zombie computers.
  - Like the other network summary reports, it is fully customizable.

Server-side tasks

### Reporting tasks

### • Top N Viruses

- Using a pie diagram and a bar chart, this report displays the Top N viruses detected in a given time period, including summary information about their total number and the date of first and last detection of each virus.
- You can customize the N parameter that specifies the number of viruses to be included in the report, but we suggest that you don't use numbers higher than 20. Otherwise, the report may become less readable.

• Actions on Top N Viruses

- This report is like the previous one, except that it shows the actions taken on the Top N viruses, not data on the viruses themselves.
- The data included in the report can be displayed by time/date period, virus name mask and, as usual, the N parameter. For this report, we recommend setting N to a value no larger than 15.

### Server-side tasks

### Reporting tasks

### • Top N Infected Files

- This report shows the Top N infected files in the form of a pie diagram and a bar chart, accompanied by a comprehensive list of these files, together with their count and time information.
- The name of an infected file is prefixed by the name of the computer on which the virus was detected.
- Even though the N parameter is not limited, we suggest that you use numbers no higher than 20, otherwise, the report may become less readable. You can also restrict the date/time span (including custom spans) for which to report infected files.

### Top N Infected Computers

- This report shows a summary (as a pie diagram and a table) of the Top N most often infected computers on the network.
- You can specify whether the report should include detailed information about each of the computers in the table.
- We suggest that you use numbers no higher than 20 for the N parameter.
- You can also define a group and domain mask and a date/time period.

Server-side tasks

### Reporting tasks

- Infection Source Summary
  - This report creates an easy-toread table showing the relative frequency of various infection vectors—mail, hard disk, removable media, network, and script.
  - You can define the time/date period of the report. The report includes a pie chart for quick assessment.

- Network Infection Summary
  - The Network Infection Summary report is like the Top N viruses report, except that it shows a list of all viruses that have been found on the network, not only the Top N.
  - If the number of viruses is so large that the report becomes hard to read, you can reduce the virus list by applying a mask or narrowing the date/time period.

Server-side tasks

### Reporting tasks

- Virus Actions Summary
  - This report gives a tabular and graphical summary of actions taken on infected files—deleted, repaired, moved to Virus Chest, etc.
  - As always, you can set the time/date period of the report.

- Change of Logical Disks Summary
  - This report is a bit different, because it is not directly related to the antivirus protection.
  - It shows a summary of changes in the logical drive mappings on the managed computers, e.g., attachment of a USB disk, mapping of a network drive, etc.
  - You can specify the time/date period.

Server-side tasks

### Reporting tasks

- Top N Attacked Computers
  - This report shows the Top N computers that have been attacked (unsuccessfully) by a network worm, as detected by the avast! Network Shield.
  - You can define the parameter N and the time/date period.
  - This report is generated as a pie chart, a bar chart, and a table.

Top N Network Attacks

- The Top N Network Attacks report shows a summary of network attacks detected by the avast! Network Shield.
- You can define the N parameter and the time/date period.
- The report provides comprehensive information, including time stamps and the IP address that each attack came from.

It includes a pie chart and a bar chart.

### Server-side tasks

### Reporting tasks

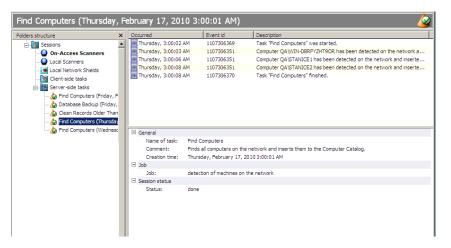
		? <mark>×</mark>
Reports		
Virus actions summary		
Actions on Top N viruses		
Change of logical disks summ	nary	
Top N attacked computers		-
		E
Virus infections summary		-
•	III	•
Sort by <u>c</u> omputer name	Number of records to sh	now:
Sort <u>a</u> scending	Virus name mask:	*
Show <u>d</u> etails	Computer name <u>m</u> ask:	*
Include machines <u>w</u> /o avast!	Group name mask:	*
	Rep	oort time span
-		
<u>H</u> elp	<u>о</u> к	Cancel
	<ul> <li>Virus actions summary</li> <li>Actions on Top N viruses</li> <li>Change of logical disks summary</li> <li>Top N attacked computers</li> <li>Top N network attacks</li> <li>Virus infections summary</li> <li>Sort by computer name</li> <li>Sort by computer name</li> <li>Sort ascending</li> <li>Show details</li> <li>Include machines w/o avast!</li> </ul>	Image: Virus actions summary         Actions on Top N viruses         Change of logical disks summary         Top N attacked computers         Top N network attacks         Virus infections summary         Image: Virus infections summary         Sort by computer name         Number of records to slip         Sort ascending         Virus name mask:         Show details         Computer name mask:         Include machines w/o avast!         Group name mask:

Virus Infections Summary

- This creates a tabular report that shows all machines on which avast! found a virus during a given time period.
- This includes information about all viruses, infected files and actions applied to these files, for the computers specified in the reporting task's properties.
- This report is useful e.g. for finding out which computers are most exposed to viral attacks so that appropriate countermeasures can be taken.

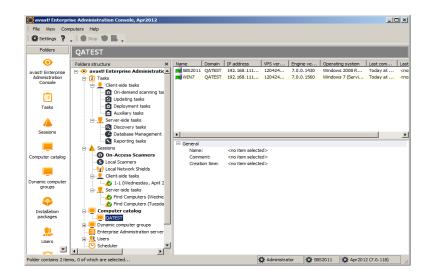


### Sessions

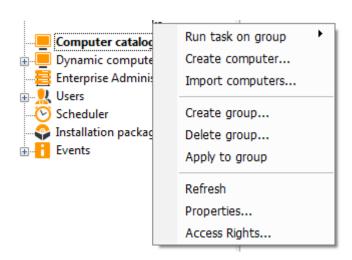


- Each time a task is run, a new session is created by the avast! software.
- A session is an object that defines a particular instance of a run task. For example, if task X is started five times, five different sessions are created, where each contains the results of the specific task.
- For some tasks, the session contains only basic status data; for others, it can hold many results (such as results of on-demand scanning) or even binary data (e.g., reports).
- There are also two special predefined sessions.
  - The "On-Access Scanners" session contains all the results of all on-access scanners on the network.
  - The "Local Scanners" session contains the results of all local on-demand scans, that is, those that were not invoked on behalf of an AEA scanning task.

# **COMPUTER CATALOG**



- The Computers folder (called "Computer Catalog" in the console) works as a container for all managed machines on the network.
- It has a tree structure, so you can create as many subfolders as you wish, to achieve optimal organization. There can be no duplicates; every computer has its fixed position in the tree.
- To rearrange the computers in the structure, you can use the drag 'n' drop method.
- The Computer Catalog is where all the security policies are set: Each folder can have a different set of policies. By default, the policies are inherited from the root to the leaves, but they can be overridden at any level. Therefore it is important to pay careful attention when building the tree.



- Right clicking on a specific computer group allows you to:
  - Run a task on a specific group
  - Create a computer
  - Import computers
  - Create/Delete a group
  - Apply changes to a group
  - Refresh the GUI
  - Change group Properties
  - Change Access rights

_		
Computer catal     Oynamic compu     Enterprise Admir	Run task on group Create computer Import computers	On-demand scanning tasks  Updating tasks Deployment tasks
<ul> <li></li></ul>	Create group Delete group Apply to group	Auxiliary tasks
	Refresh Properties Access Rights	

- The "Run task on group" option allows you to run any of the following:
  - On demand scanning tasks
  - Updating tasks
  - Deployment tasks
  - Auxiliary tasks

Computer	Run task on group
Dynamic of	Country and the second se
	Create computer
	OK Cancel

- In some cases, you may not be able to use the Discovery Task (perhaps because your network doesn't run ActiveDirectory or the computer browser does not work).
- Then you should take advantage of AEA's ability to create a computer manually via the right click feature on a specific computer group
- You can create a computer by inserting basic information such as:
  - Computer name
  - Computer domain
  - Computer IP address

Gerver-sic     Computer ca     Dynamic cor     Enterprise Ac     Open	npu Create (	k on group			
Look in:	Documents		•	G 🌶 🖻 🗉	
Recent Places Desktop Libraries	Name	^ No items	match your s	Date modified earch.	Туре
Computer Computer Network	<ul> <li>✓</li> <li>File <u>n</u>ame:</li> <li>Files of type:</li> </ul>	Text files (*.bd)			Open Cancel

- In some cases, you may not be able to use the Discovery Task (perhaps because your network doesn't run ActiveDirectory or the computer browser does not work).
- Then you should take advantage of AEA's ability to import the machine list from an external data source.
- You can import the list of computers to be placed in the Catalog by means of a simple text file. The text file has a very simple structure.
  - see the next page

📕 Untitled - Notepad								
File Edit Format View He	þ							
Susie Building-A	192.168.1.76							
Charlie Building-A	192.168.1.78							
Petr Building-A	192.168.1.79							
Laso Building-A	192.168.1.80							
John Building-B	192.168.1.120							
Mike Building-B	192.168.1.122							
Jessica Building-B	192.168.1.124							

- Each line represents one computer and has three columns. The columns are separated by a single tab character.
  - The first column specifies the name of the computer, as it should appear in the Catalog.
  - The second column represents the name of the domain or workgroup that the computer belongs to.
  - The third row is interpreted as the computer's IP address and should be in the form xx.xx.xx where xx is a number between 0 and 255.
- After the text file is ready (either by compiling it by hand in a text editor or by exporting it from an external application), all you need to do is import it to the AEA.
- To do this, navigate to any folder in the Computer Catalog and select the Import Computers... menu option.

ers structure X	Name A D	omain I	P address	VPS version	Engine ve	Operatin	Last com	Last virus
avast! Administration Console			10.1.4.6	090617-0	4.8.1038.0	Windows	Tuesday,	<no td="" virus.<=""></no>
🗄 📴 Tasks		-	205.178.152.103	<not inst<="" td=""><td><not inst<="" td=""><td></td><td><not spe<="" td=""><td><no td="" virus.<=""></no></td></not></td></not></td></not>	<not inst<="" td=""><td></td><td><not spe<="" td=""><td><no td="" virus.<=""></no></td></not></td></not>		<not spe<="" td=""><td><no td="" virus.<=""></no></td></not>	<no td="" virus.<=""></no>
Client-side tasks     Client-side tasks     On-access scanning tasks     On-demand scanning tasks	Server1 Q	2Α :	192. 168. 111. 141	110216-1	4.8.1038.0	Windows	Yesterda	<no td="" virus<=""></no>
Discovery tasks	•							
	Name		CANOPUS					
Reporting tasks     Sessions     On-Access Scanners     Local Scanners	Found		August, 9 (I	Mondaul				
	1 50 T ( ) 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		August, 9 (I	nonuay)				
	🗆 Hardware							
Local Network Shields	CPU name		AMD Athlon	(tm) 64 Pi	rocessor 3	200+, M№	1X, ~2172	Mhz
ioi Client-side tasks ⊕iiii Server-side tasks	Number of CF	۳Us	1					
Computer catalog	Physical mem	ory	1022.7 M					
	Configuration							
	Domain		ASW					
	Group name		ORION					
	IP Address		192.168.1.	92				
	Operating sys	ctor	Windows XP		Dack 2)			
	Available driv				rack 2)			
		2.1	A;C;D;F;I;L					
	Temp dir spac	Ie	52.9 GB					
	Time zone		GMT+1					
	ADNM Agent							
	Last communi	ication	Thursday, 9:18:18 PM					
	Agent GUID		653ab1f5-6	dd5-4d84	-83f6-956	6693fd25	1	
	Installed proc	ducts	avast! Net(	lient Editi	on, avast	Mirror		
	E avast!	a.a. 1979)			,			
	Last Virus		EICAR Test	-MOT view	e11			
	Version		4.5.163.0					
		<b></b> .	학학 문학 문 문 문 문 문					
	VPS Creation	lime	Wednesday	', 10:00:0	U PM			
	VPS Version		0438-2, 09/					

- The AEA monitors a number of details about each and every managed machine, related both to avast! and to the system configuration.
- This information can be used by the administrator to analyze problems, and also to get a better idea of the overall network structure.
- The stored information includes the computer name and the domain/workgroup, IP address, CPU type, installed RAM, operating system and service pack level, time zone, disk space in the TEMP directory, and other data.
  - It is refreshed upon each contact with the client.

#### Computer catalog

Name 🔺	Domain	IP address	VPS version	Engine ve	Operatin	Last com	Last virus
Client1	QA	10.1.4.6	090617-0	4.8.1038.0	Windows	Tuesday,	<no td="" virus<=""></no>
Client2	QA	205.178.152.103	<not inst<="" td=""><td><not inst<="" td=""><td><unknown></unknown></td><td><not spe<="" td=""><td><no td="" virus<=""></no></td></not></td></not></td></not>	<not inst<="" td=""><td><unknown></unknown></td><td><not spe<="" td=""><td><no td="" virus<=""></no></td></not></td></not>	<unknown></unknown>	<not spe<="" td=""><td><no td="" virus<=""></no></td></not>	<no td="" virus<=""></no>
Server 1	QA	192. 168. 111. 141	110216-1	4.8.1038.0	Windows	Yesterda	<no td="" virus<=""></no>
4							

The console also distinguishes individual computers in the Catalog by using icons. Each computer has one of the following icons:



#### Green computer

 This icon indicates a healthy computer state. The computer has not been recently infected with viruses, and it is switched on and actively communicating with the EAS.



#### Red computer

 This icon indicates an infection. A virus has been found on the machine recently. The computer keeps the "red" state until it is manually marked as clean by an Administrator (by using the "Mark computer as clean" context menu option).

#### Gray computer

 This icon indicates that there is no managed product installed on the machine or the machine has not yet communicated with the server. This includes, but is not limited to, newly discovered computers.



#### **Black computer**

This icon indicates that the computer hasn't communicated with the EAS recently (but still has a managed product installed). The time period after which computers are marked as black can be customized in the global EAS settings; the default value is 20 minutes. The fact that a computer is marked black doesn't necessarily mean anything bad. E.g. computers that are turned off will have this icon. It is possible to verify the offline status of such computers by rightclicking them and selecting the "Verify offline status," command.

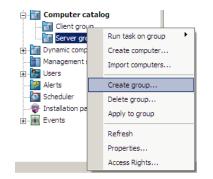


#### Computer with a key symbol

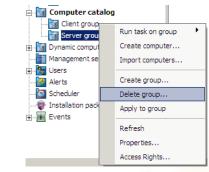
This icon indicates that the number of licenses in your license file is not sufficient. That is, the Catalog contains a larger number of computers than the AEA license permits. The EAS chooses the excess machines randomly but prefers those that don't have any managed product installed or have not yet communicated with the server, i.e., those that would be otherwise grayed-out.

#### Computer catalog

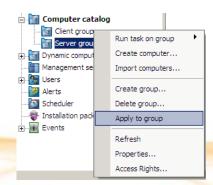
If you want to create a computer group/sub-group just right click on the Computer catalog or on the specific Computer group.



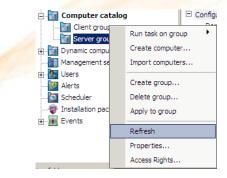
If you need to delete a whole computer group, make sure you didn't leave any important computer in the list, otherwise everything will be deleted.

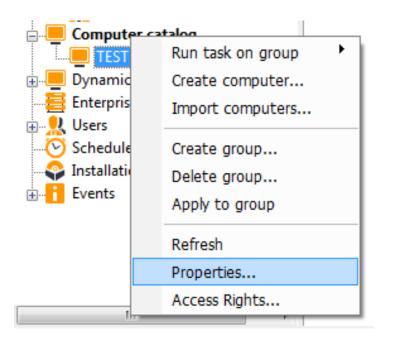


• Whenever you need to apply any changes to a specific computer or computer group you MUST click the "Apply to group" or "Apply to computer" button! Otherwise none of the changes will be applied!

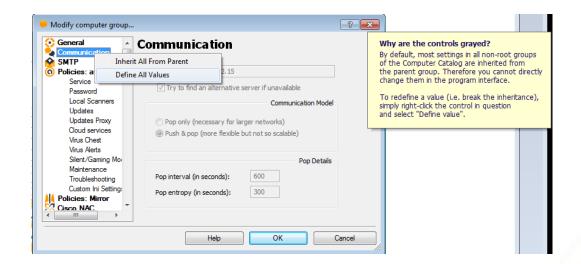


• Refreshing the GUI could help if changes have been made but are not displayed. If the Refresh feature does not help, restart the AEA console.





- The Computer Catalog is where all the security policies are set:
  - Each folder can have a different set of policies.
  - By default, the policies are inherited from the root to the leaves, but they can be overridden at any level.
  - Therefore it is important to pay careful attention when building the tree.



- An undefined policy value is indicated by the appropriate control being greyed (dimmed) in the Group Properties dialog.
- Since no policies are overridden by default, all controls in the properties of all computer groups except the root are greyed.
- To define a policy, right-click the control and choose "Define value." The control becomes enabled and can be used to specify a value.
- If you later decide to undefine the policy, right-click it again and choose "Inherit from parent."

Nation 📃	General	? <mark>×</mark>
SMTP	Group Name	
Service	TEST	
Password Local Scanners	Comment	
Updates		
Updates Proxy		
Cloud services		
Virus Chest	Parent group: <pre><root></root></pre>	1
Virus Alerts	Parent group.	ļ
Silent/Gaming Mo Maintenance		
Troubleshooting		
Custom Ini Setting:		
Policies: Mirror		
		Cancel

- The Properties dialog contains the policy settings for all supported managed products, whether they are actually installed on the client machines or not.
- If a machine has only the Mirror product installed (the Mirror is also considered a managed product), the avast! Antivirus policy settings will not be effective for that machine, but the Mirror policy settings will.
- Most of the policies are set directly as properties of the Computer Group objects.

- Note:
  - An important exception is the case of on-access scanning tasks, i.e., the resident-protection settings. These are only stored in the group properties as a reference to an on-access scanning task object.
  - If you want to redefine the on-access scanning settings for a given machine, you first need to create a new on-access task and then assign it to the proper group. Therefore, individual onaccess settings cannot be inherited in the Catalog tree.

### Computer catalog

Modify computer group			? 💌
General Communication	Communic	ation	
O Policies: avast! An	EAS <u>a</u> ddress:	10.0.2.15	
Service Password	📝 Try to find a	an alternative server if unavailable	
Local Scanners Updates Updates Proxy Cloud services Virus Chest Virus Alerts Silent/Gaming Mo Maintenance Troubleshooting Custom Ini Setting: Policies: Mirror Cisco NAC	Communication Model Pop only (necessary for larger networks) Push & pop (more flexible but not so scalable)		
	Pop <u>i</u> nterval (in Pop <u>e</u> ntropy (in		
· · · · · · · · · · · · · · · · · · ·		Help OK C	Qancel

#### EAS address

- Change the EAS address (when moving to a new/another server) in the Properties window of all relevant groups in the Computer Catalog, and wait for a pop timeout to occur on the client machines (5-15 minutes by default, unless changed in the global EAS settings).
- Verify that the clients on the network are moving to the new server; you should see that the Last Connected field keeps getting updated.

#### Communication models

- Pop only
  - The server never tries to contact the client computer (e.g. for status verification after a task was started)
- Push and pop
  - The server tries to contact the client computer (task status verification is POP model only)

#### • Pop details

- Pop interval
  - The average interval between client computers connecting with the server (to spread the client requests over a period of time)
- Pop entropy
  - A random value which is added to the Pop interval. The actual interval between any two client computers connecting with the server is given by:
  - Pop\_interval pop\_entropy ≤ actual interval ≤ pop\_interval + pop\_entropy >

### Computer catalog

Modify computer group.			? 🔀
General Communication SMTP O Policies: avast! An	SMTP Please set SMTP server de all managed components ca	tails on this page. They will be apable of sending e-mails.	used by
Service Password Local Scanners	Server <u>a</u> ddress:	SMTP smtp.server.com	Settings
Updates Updates Proxy Cloud services	Port:	25	
Virus Chest Virus Alerts	Erom address:	address of the sender	
Silent/Gaming Mo Maintenance	SMTP server require		
Troubleshooting Custom Ini Setting:	<u>U</u> ser:	Username	
Policies: Mirror	Pass <u>w</u> ord:	•••••	
4 <u> </u>			
	Help	ОК	Cancel

- On this page, you can specify your SMTP server parameters, which avast! uses to send e-mail messages, especially when:
  - Sending warning messages when a virus has been found.
  - Sending files from the Chest to AVAST Software.
  - Sending avast! crash reports to AVAST Software.

#### Server address

the address of the outgoing e-mail server (e.g. smtp.server.com or 192.168.1.25).

#### Port

- the port number (the default is 25).

#### From address

- address of the sender ("From").

#### Note:

- If the SMTP settings above (SMTP settings under avast! Program settings or/and SMTP settings under Computer catalog properties) are not specified, NONE of the reported alerts will be sent to the Administrator's email!
- Remember that all settings under Computer catalog must be Applied first! They must be "Applied to group" or to a specifiec computer! Otherwise NONE of those settings will be saved on the client computer(s).

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#### Computer catalog

Modify computer group				? <b>x</b>
General Communication SMTP Policies: avast! Ar Service Password Local Scanners Updates Updates Updates Proxy Cloud services Virus Chest Virus Alerts		Antivirus	Logging level	
Silent/Gaming Mo Maintenance Troubleshooting Custom Ini Setting: Policies: Mirror Cisco NAC	© Emergency ○ Alert ○ Critical error ○ Error <u>H</u> elp	<u>Warning</u> Notice Info Debug K		

### Logging levels

- Emergency/Alert/Critical error/Error
- Warning/Notice/Info/Debug

Modify computer group		? <mark>×</mark>
General A	Service	
SMTP	avast! Service Management	
Service	Check the <u>a</u> vast! service every 10 minutes	
Password Local Scanners	☑ Start avast! service if not running	
Updates Updates Proxy	☑ Overwrite avast! settings every         30         minutes	
Cloud services Virus Chest Virus Alerts Silent/Gaming Mo Maintenance Troubleshooting Custom Ini Setting: Policies: Mirror	Enable remote access to the Virus Chest	
		<u>C</u> ancel

- avast! Service management
  - Check the avast! service every XX minutes
    - Start avast! service if not running
  - Overwrite avast! settings every XX minutes
- Enable remote access to the virus chest



- avast! Password
  - Enable control password
    - Password used to open/modify the avast! GUI on the client machines
    - Specific Protected Areas can be selected from the list

General Communication SMTP Policies: avast! An	Local Scanners On-Access User Interface (tray icon)
Service Password Updates Updates Proxy Cloud services Virus Chest Virus Alerts Silert/Gaming Mov Maintenance	Enable     Oisable
Troubleshooting Custom Ini Setting: Policies: Mirror Cisco NAC.	☑ Report on infected files from on-access scanners ☑ Report on infected files from local scanners

- On-access user interface (tray icon)
  - Allows the user to interact with the avast! system tray icon (if enabled)
- Report on infected files from onaccess scanners
- Report on infected files from local scanners

Modify computer group		? 🔀
General A Communication	Updates	
SMTP	Update from:	● <u>E</u> AS
Service		Second-level mirror:
Password Local Scanners Updates Updates Proxy	VPS Update:	● Auto ○ Ask
Cloud services Virus Chest Virus Alerts	Program Update:	<ul> <li>Manual</li> <li>Ask</li> <li>Manual</li> </ul>
Silent/Gaming Mo Maintenance	Auto-up <u>d</u> ate every:	30 minutes
Troubleshooting Custom Ini Setting:	🔽 If mirror is unreacha	able, update from the Internet
Policies: Mirror Cisco NAC.		
	<u>H</u> elp	<u>QK</u>

- Update from
  - EAS
  - Second-level mirror
- VPS update
  - Auto/Ask/Manual
- Program update
  - Ask/Manual
- Auto update every
  - XX minutes
- If mirror is unreachable, update from the internet

Modify computer group.	. ? 🔀
General Communication SMTP Policies: avast! An Service	Direct connection (no proxy)     Auto detect (use Internet Explorer settings)
Password Local Scanners Updates Updates Proxy	HTTP proxy server     Socks v4 proxy server     Address: Port: 0
Cloud services Virus Chest Virus Alerts Silent/Gaming Mo Maintenance Troubleshooting Custom Ini Setting:	Authentication Type: No authentication Username: Password:
Policies: Mirror	Help QK Cancel

- The proxy settings on this page are important when avast! needs to access the internet, for example, when carrying out updates.
- If you connect directly to the internet (i.e. not through a proxy), select "Direct connection (no proxy)". Note: dial-up connections do not use a proxy.
- If you are not sure whether you use a proxy server, or which proxy server you use, select "auto detect" or ask your internet provider or network administrator.
- If you connect to the internet through a proxy server and you know the proxy server details, select "Specify proxy server" and enter the proxy details:
  - Type HTTP or SOCK4
  - Address Enter the address of your proxy server
  - Port Enter the port your proxy server uses
- Authentication type specify here whether the proxy server requires authentication and if so, the type of authentication
  - Username and password -should be entered if required for authentication

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### Computer catalog

<ul> <li>Modify computer group</li> <li>General</li> <li>Communication</li> <li>SMTP</li> <li>Policies: avast! An</li> </ul>	Cloud services Use the settings on this page to set up the avast! doud features.
Service Password Local Scanners Updates Updates Proxy	Reputation Services Enable <u>r</u> eputation services Reputation services allow avast! to make more intelligent decisions by querying the avast! file reputation database.
Updates Proxy Cloud services Virus Chest Virus Alerts Silent/Gaming Mon Maintenance Troubleshooting Custom Ini Setting: Policies: Mirror Cisco NAC	Streaming Updates Enable streaming updates Streaming updates allow avast! to always stay up-to-date against the latest threats.
	Help OK Cancel

Enable reputation services

 Reputation services allow avast! to make more intelligent decisions by querying the avast! File reputation database.

### • Enable streaming updates

- Streaming updates allow avast! to always stay up-to-date against the latest threats.
- NOTE:
  - Internet connection is required!

📕 Modify computer group			? 💌
General Communication SMTP O Policies: avast ! An Service Password Local Scanners Updates Updates Proxy Cloud services Virus Chest Virus Alerts Silent/Gaming Moi Maintenance Troubleshooting Custom Ini Setting: Policies: Mirror Cisco NAC	Use the settings on this page to f virus chest. Maximum size of chest: (0 means no limit) Maximum size of file to be sent:	ine-tune the behavior of the 256 MB 16384 KB	
	<u>H</u> elp	<u>о</u> к	<u>C</u> ancel

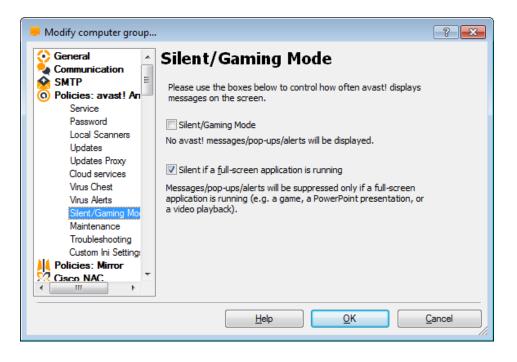
- Here you can specify the maximum permitted size of the virus chest and thus the maximum amount of space it can take up on your computer.
- You can also specify the maximum size of any individual file that is sent to the virus chest.

🟓 Modify computer group		? 🗙
General Communication SMTP O Policies: avast! An- Service Password	Virus Alerts avast! can notify other users when a virus is found on this computer. Alerts configured on this page will be sent whenever a virus is detected by any avast! component.	
Local Scanners Updates Updates Proxy Cloud services Virus Chest Virus Alerts Silent/Gaming Mor Maintenance Troubleshooting Custom Ini Setting:	Send via Send To	
Policies: Mirror Cisco NAC.	<u>A</u> dd	<u>R</u> emove

- This is where you can define the alerts (or notifications).
- The alerts can then be assigned to the scanning tasks so that whenever a virus is found, the alert will be used to notify someone about the problem.
- This feature is useful for network administrators who will be notified about the presence of a virus on any computer that they are responsible for, so that they can react quickly.

Modify computer group		_		? 💌	
General Communication SMTP O Policies: avast! An Service	computer. Alert	fy other users when a vi	e will be sent whenever a		
Password Local Scanners Updates Updates Proxy Cloud services Virus Chest Virus Alerts Silent/Gaming Moi Maintenance Troubleshooting Custom Ini Setting:	Send via	Send To			
Policies: Mirror			Add	<u>R</u> emove	
		us Alert			×
	SI	MTP   MTP  API  inters	ОК	Cance	!

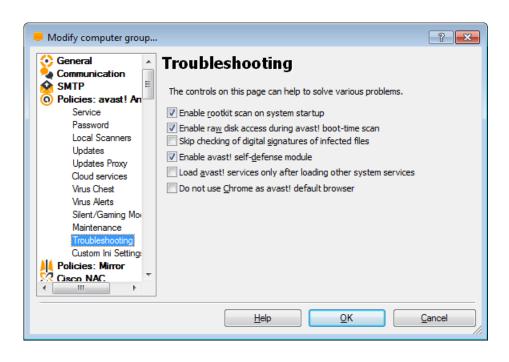
- The alert can be sent in any of the following ways:
- MAPI
  - The alert will be sent as an e-mail, using the MAPI protocol. Enter the MAPI profile name, together with the corresponding password to use.
- WinPopup
  - The alert will be sent using the net send command.
     Enter the IP address or the network name of the computer to send the warning to.
- SMTP
  - The alert will be sent as an e-mail, using the SMTP protocol. It is necessary to define the SMTP Server, i.e. the mail server the messages will be sent through (e.g. smtp.company.com or 192.168.1.1). Additionally, you have to specify the port that will be used (the standard value is 25). Finally, enter the sender address ("From", i.e. the user address).
- Note:
  - Make sure that you also insert the SMTP settings under the Computer catalog properties! If they are not specified, NONE of the reported alerts will be sent to the specified email!



- At various times while your computer is running, messages may be displayed on your screen e.g. when the virus definitions have been updated, when an incoming email is being scanned etc. This can result in full-screen applications (e.g. games) being interrupted as Windows switches from full-screen mode to normal mode when the message appears.
- On this screen you can specify that messages will never be displayed (Silent mode), or will not be displayed if a full-screen application is running.

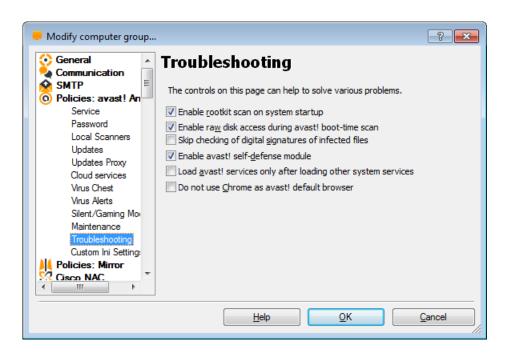
Modify computer group	8	x
General Communication SMTP O Policies: avast! An	Maintenance On this page you can adjust the avast! housekeeping settings.	
Service Password	Auto-Cleanup	
Local Scanners	☑ Delete scan logs older than 30 days	
Updates Updates Proxy	☑ Delete temporary scan logs older than 1 days	
Cloud services Virus Chest	☑ Delete events older than 2 days	
Virus Alerts Silent/Gaming Mov Maintenance Troubleshooting Custom Ini Setting: Policies: Mirror	Logs Maximum size of each log file: 4096 KB	
		_
	Help <u>QK</u> <u>Cancel</u>	

- On this page you can adjust the avast! Housekeeping settings for Auto-cleanup.
  - Delete scan logs
  - Delete temp. Scan logs older than XX days
  - Delete Events older than XX days
- You can also specify the maximum size of each log
- And select whether you want to enable debug logging



- Changing the settings on this page may help to resolve certain specific problems. However, these settings should not be changed without good reason. If in doubt, please contact AVAST Software first.
  - Enable rootkit scan on system startup Normally avast! scans for rootkits whenever the operating system is restarted. Uncheck this box if you do not want this scan to be carried out whenever your system is restarted.
  - Enable raw disk access during avast! boot -time scan - During a boot-time scan, avast! uses a special method to access the raw data on the hard disk, to check for any viruses that may be hidden there.
  - Skip checking of digital signatures of infected files - to prevent false positive alerts, avast! checks files for digital signatures. If a file is detected as suspicious, but also contains a valid digital signature of a trusted authority, it is likely to be a false positive. In this case the file will not be reported as suspicious. If this box is checked, all suspicious files will be reported, including those with valid digital signatures.

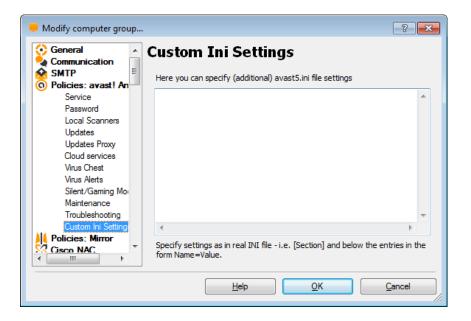
#### Computer catalog



 Enable avast! self-defense module -Some viruses deliberately target antivirus software and try to switch it off by deleting or modifying critical files. avast! contains selfdefense features that prevent such attacks by blocking the operation.

#### Load avast! services only after loading other system services

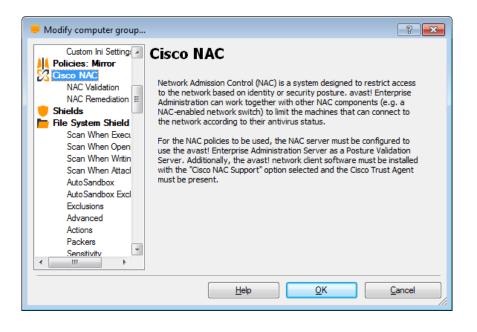
The avast! service is normally loaded quite early in the boot process. Sometimes this can cause problems when loading other system services e.g. the system may appear to "freeze" temporarily after starting. Checking this box will delay the loading of avast! services until after the other system services are loaded.



- Some settings (policies) of the managed products cannot be directly set through the Computer Group's properties because there are no GUI controls defined for them.
- These mainly include settings that are less important to most users. The majority of these settings are changed by editing the .ini files on the managed client computers.
- AEA makes setting these properties much easier with remote batch editing of client .ini files. In fact, the INI file entries become part of the Computer Group properties (and, as such, use features like inheritance).
- The syntax is the same as in the case of real INI files. Section names are included in brackets, and entries are specified in the form entry=value (each entry on a separate line).
- Note:
  - Existing controls such as SMTP settings etc.. can also be changed via Custom.ini features.
  - Don't forget to use the "Apply to" feature! Otherwise none of the changes/settings will be applied to the selected computer or computer group.

Modify computer group		? 💌
General     Communication     SMTP     Policies: avast! An     Service     Password     Local Scanners	Policies: Mirror The following settings will only be effective if a computer is serving as a mirror (i.e. has the mirror product installed and is configured to work as one of the 2nd level mirrors)	
Updates Updates Proxy Cloud services Virus Chest Virus Alerts Silent/Gaming Moo Maintenance	Mirror from:	
Troubleshooting Custom Ini Setting: Policies: Mirror Cisco NAC.	Please note that if you select mirroring directly from the Internet, you will need to deliver the license file to the mirrors (manually).	
		ancel

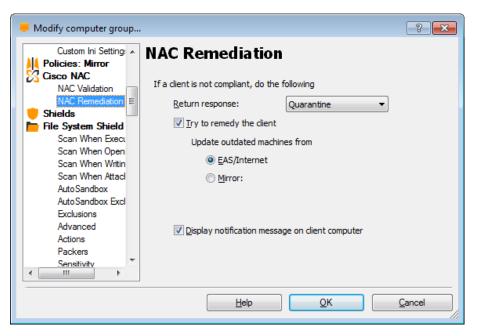
- The following settings will only be effective if a computer is serving as a mirror (i.e. has the mirror installed and configured to work as one of the 2nd level mirrors).
- Mirroring
  - From EMS
  - From Internet
- Auto-mirror every
  - XX minutes



- NAC is a technology developed by Cisco Systems that is designed to enforce security policy compliance on computers connecting to the network. NAC can limit network access when a computer fails to meet certain criteria.
- AEA integrates with NAC to proactively protect against security threats such as viruses and worms before they are introduced into your network.
- Components of a network using Cisco NAC are:
  - NAC-enabled network access device (NAD)
  - the Cisco Secure Access Control Server (ACS)
  - avast! network client with posture plugin (PP) and the Cisco Trust Agent (CTA)
  - avast! Enterprise server (EAS) with posture validation server (PVS)
  - When a computer attempts to connect to the network a NAC-enabled NAD detects it and contacts the ACS. The ACS then requests posture credentials from the CTA running on the computer. The CTA asks the avast! PP for the antivirus status (e.g. version) and sends the posture to the ACS. The ACS forwards the credentials to the avast! PVS, which validates them according to the requirements defined by the administrator. The PVS returns the results to the ACS, which maps them to a network authorization in the network access profile. The attributes from the profile are sent to the NAD for enforcement on the computer. The computer can e.g. be granted full access, limited access (quarantined) or denied. If the computer was not fully compliant with the requirements, it can be sent actions that should be performed, to automatically remedy its status (e.g. update). Consult Cisco documentation for more details on the NAC system and its individual components. For configuration of NAC with ACS 4.0, CTA 2.0 and various Cisco NADs, refer to the "NAC Framework Configuration Guide"

Modify computer group	
Custom Ini Setting:	NAC Validation
Cisco NAC	Enforce program version
NAC Remediation E Shields	
File System Shield Scan When Exect	Enforce VPS version
Scan When Open Scan When Writin	
Scan When Attacl AutoSandbox	
AutoSandbox Excl Exclusions	Enforce running on-access scanner
Advanced Actions Packers	
Sensitivity	
	Help OK Cancel
	Help OK Cancel

- The NAC Validation page defines the requirements for the status of avast! antivirus on computers that are connected to your network.
- You can enforce:
- Program version
  - The program version can be specified as an exact version number or you can enforce the latest version that is downloaded to your EAS mirror
- Virus database (VPS) version
  - The VPS version can be specified as an exact version number or as the latest available VPS
- Active on-access protection
- If the validated computer meets all the specified requirements -> avast! PVS returns status value "Healthy".
- If any of the requirements are not met -> avast! PVS takes the actions specified on the NAC Remediation page.
  - You can define what status value will be returned (Checkup, Quarantine or Infected) and whether avast! should try to remedy the situation.

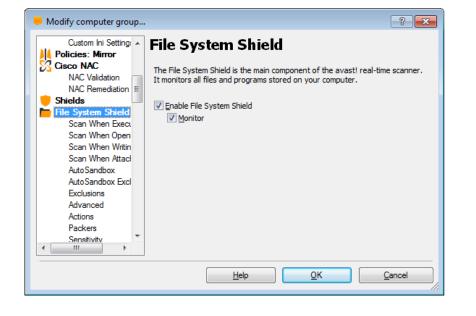


- The remediation action will be delivered to the validated computer where avast! will try to carry it out.
- Remediation means updating, in the case of an outdated avast! program or VPS, or starting the on-access scanner if it was not active.
- You can optionally specify a mirror from which the update will be downloaded. This can be useful if the validated computer was quarantined and cannot access the EAS mirror.
- If you select the option to display a notification message on the client computer, the user will see a pop up message in the bottom right corner of the screen saying that avast! is taking action to satisfy the policies defined by the network administrator and also if the remediation action was successful or not.

## FILE SYSTEM SHIELD

### Computer catalog

#### File System shield



• The File System Shield is the main component of the avast! real-time scanner. It monitors all files and programs stored on your computer.

### Computer catalog

Custom Ini Settings	*	Scan When Executing
Cisco NAC NAC Validation NAC Remediation Shields	m	The following settings determine which files and programs should be scanned at the moment they are executed.
File System Shield Scan When Executing Scan When Opening Scan When Writing		Example: the program excel.exe will be scanned whenever Microsoft Excel is executed.
Scan When Attaching AutoSandbox AutoSandbox Exclusions Exclusions		Scan scripts when executing Example: a JS (JavaScript) file will be scanned whenever it's executed.
Advanced Actions		Scan libraries (DLLs) when loading Will scan all dependent files (DLLs etc.) whenever a program is
Packers Sensitivity Report	-	executed.
Rebort		Help OK Cancel

- Here you can specify the types of file that should be scanned at the moment they are run or "executed". It is recommended that all of these boxes are checked.
- Checking the boxes:
  - "scan programs when executing"
  - "scan scripts when executing"
    will ensure that all programs and scripts will
    Be scanned at the moment they are run to
    ensure they are clean and will not cause
    any damage to your computer or your data.
  - If "Scan libraries (DLLs) when loading" is checked, all DLL files will be scanned when they are loaded. This may result in some applications starting more slowly, but will significantly increase the security of your system.

### Computer catalog

Custom Ini Settings	*	Scan When Opening
Cisco NAC NAC Validation NAC Remediation Shields File System Shield Scan When Executing Scan When Opening Scan When Opening Scan When Mrting Scan When Mrting Auto Sandbox Auto Sandbox Auto Sandbox Exclusions Advanced Actions Packers Sensitivity	m	Use the following settings to define which files should be scanned at the moment they are opened.  Scan gocuments when opening The term "documents" technically means Microsoft Office documents and all other OLE files.  Scan files with gustom extensions  Add Remove  Scan all files If this option is selected, all files on the system will be scanned at the moment they are opened, which may have a negative impact on your system's performance.

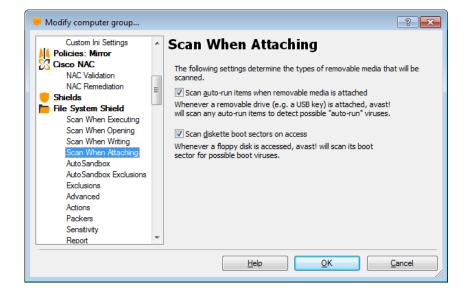
- If the box "Scan documents when opening" is checked, Microsoft Office documents and other OLE files will be checked at the moment they are opened. To determine which documents and files to check, avast! will check their actual content, not just the file extension.
- You can also specify files that should be scanned based on their extension.
- To scan files with a specific extension, check the relevant box and type the extension in the box provided.
  - You can use the wildcard "?" for example, if you want all .htm and .html files to be scanned when opening them, you can enter both extensions, or just use the wildcard "ht?". Note however, that this would result in all files with extensions that begin with "ht" being scanned e.g. files with the extension .htt.
- Alternatively, you can specify that all files should be scanned, however this could slow your system down quite significantly while the scan is in progress.

### Computer catalog

Modify computer group	_	
Custom Ini Settings	*	Scan When Writing
Policies: Mirror		
Cisco NAC NAC Validation		The following settings determine files that should be scanned at the moment they are created or modified.
NAC Remediation	Ξ	Scan files with default extensions
🛑 Shields		The default extensions are maintained by the avast! developers,
📙 File System Shield		and provide the optimal balance between performance and
Scan When Executing		security.
Scan When Opening		Scan files with custom extensions
Scan When Writing		
Scan When Attaching		Add
Auto Sandbox		Remove
AutoSandbox Exclusions		
Exclusions		
Advanced		
Actions		✓ Scan all files
Packers		If this option is selected, all files on the system will be scanned whenever
Sensitivity		they are created or modified, which may have a negative impact on your system's performance.
Report	Ŧ	systems performance.
		Help OK Cancel

- Here you can specify the file types that will be scanned at the moment they are saved. You can specify that all files should be scanned ("Scan all files") or just those with particular extensions:
- Scan files with default extensions only those files with extensions that are considered potentially dangerous (e.g. ".exe") will be scanned
- Scan files with custom extensions here you can specify the file types that should be scanned based on their extension. You can use the wildcard "?"; for example, if you want all .htm and .html files to be scanned, you can enter both extensions, or just use the wildcard "ht?".
  - Note however, that this would result in all files with extensions that begin with "ht" being scanned e.g. files with the extension .htt.

### Computer catalog



- Here you can specify whether removable media should be scanned when they are connected to your computer to detect potential "autorun" programs that may try to launch when the device is connected.
- You can also specify that the boot sectors of floppy disks should be scanned to detect potential boot sector viruses.

### Computer catalog

#### File System shield



The avast! AutoSandbox is a special security feature which allows potentially suspicious applications to be automatically run in a completely isolated environment.

- By default, if an application is started and avast! detects anything suspicious, it will ask you if you want to run the application in the Sandbox. As the application will be completely contained within the Sandbox, this will prevent any damage being caused to your system by any infected applications.
- Alternatively, the AutoSandbox can be configured to run suspicious applications automatically in the Sandbox. It can also be disabled completely.

### Computer catalog

#### File System shield

Custom Ini Settings Policies: Mirror	*	AutoSandbox Exclusions
Cisco NAC NAC Validation NAC Remediation		Files that will be excluded from automatic sandboxing:
Shields	E	
File System Shield		
Scan When Executing		
Scan When Opening		
Scan When Writing		
Scan When Attaching		
Auto Sandbox		
AutoSandbox Exclusions		
Exclusions		
Advanced		
Actions		
Packers		
Sensitivity		Add Remove
Report	-	

 In the AutoSandbox Exclusions, you can specify any files that should be automatically excluded so that they are not run in the Sandbox and are always run on your normal desktop

### Computer catalog

#### File System shield

NAC Validation NAC Remediation	~	Exc	usi	ion	s		
Shields File System Shield Scan When Executing Scan When Opening Scan When Writing	ш	any lir	ne to m an also	nodify	it, or click on "Add"	that will not be scanned. button to add a new loca applies (R = Read, W = 1	tion.
Scan When Attaching		R	W	х	path		*
AutoSandbox		x	x		?:\PageFile.sys		
AutoSandbox Exclusions Exclusions		x	x		*\System.da?		
Advanced		x	x		*\User.da?		E
Actions		x	x		*.fon		
Packers		x	x		*.txt		
Sensitivity		x	x		*.log		
Report		x	x		*.ini		-
Mail Shield							*
Main						Add	Remove
Behavior	-						
				_			

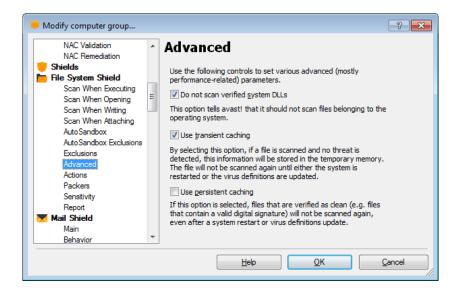
- Here you can enter or modify any locations that should not be scanned by the file system shield.
  - Note, that exclusions specified here will only apply to the File System Shield and not to any other scans.
- Certain files are excluded by default at the moment of reading and writing. You can also specify other file types that should be excluded at the moment of
  - reading
  - writing (W)
  - executing (X)

by clicking on "enter path" and either typing the path to be excluded, or clicking the browse button to select it.

• To exclude files from being scanned by any part of avast!, including manual and scheduled scans, it is necessary to specify the files or areas to be excluded in the general program settings.

### Computer catalog

#### File System shield



• Scanning time can be potentially reduced by specifying certain types of files that should not be scanned.

#### Do not scan verified system DLLs

if this box is checked, system library files will not be scanned.

#### Use transient caching

 if transient caching is used, a file that has been scanned, and in which no infection was detected, will not be scanned again the next time it is accessed. However, this is only valid until the next virus definitions update, as the file may contain an infection that was not previously detected but which may be detected based on the new virus definitions. Also, information that the file is clean will only be stored in the computer's operating (temporary) memory. This means that when the system is restarted the information will be lost, therefore the file will also be scanned again the next time it is accessed after a system restart. This box is checked by default; if you want files to be scanned every time they are accessed, this box should be unchecked.

### Computer catalog

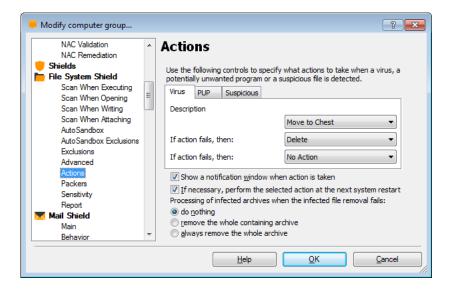
#### File System shield

NAC Validation NAC Remediation	*	Actions	
Shields File System Shield Scan When Executing Scan When Opening	m	Use the following controls to specify potentially unwanted program or a solution of the second secon	what actions to take when a virus, a suspicious file is detected.
Scan When Writing Scan When Attaching AutoSandhox	_	Description	Move to Chest
AutoSandbox AutoSandbox Exclusions Exclusions Advanced		If action fails, then: If action fails, then:	Delete   No Action
Advanced Actions Packers Sensitivity Report		Processing of infected archives wh	cted action at the next system restart
Mail Shield Main Behavior	-	o do nothing remove the whole containing an <u>a</u> lways remove the whole archi	

- On this screen, you can specify the action that should be taken automatically whenever a virus, potentially unwanted program (PUP), or suspicious file is detected.
- The default action is "No action" and if this is left unchanged, any suspicious files will be reported at the end of the scan and you will have the opportunity then to deal with them individually:
  - delete them
  - move them to the virus chest
  - do nothing
- Alternatively, you can select an action which avast! will attempt to carry out automatically:
  - Repair
  - Move to Chest
  - Delete

If any action is selected, you can then specify an alternative action to be taken if the first action fails.

### Computer catalog



- Options:
  - If necessary, perform the selected action at the next system restart - If this box is checked and the action could not be completed, avast! will attempt to carry out the action again the next time the computer is restarted. This could happen, for example where a file was in use and could not be deleted or moved.
- Finally there are additional options for dealing with infected archives:
  - By default, if an infected file is discovered in an archive file, avast! will attempt to remove it.
  - You can further specify that if the infected file cannot be removed, avast! should remove the archive (the parent archive) within which the infected file is located.
  - Alternatively, you can specify that whenever an infected file is detected inside an archive, the entire archive should always be removed.

### Computer catalog

NAC Validation NAC Remediation	~	Packers
Shields File System Shield Scan When Executing	III	Please select which archive (packer) files avast! should attempt to unpack during the scanning process.
Scan When Opening Scan When Writing Scan When Attaching Auto Sandbox Auto Sandbox Exclusions Exclusions Advanced Actions Packers Sensitivity		All Packers         Self-extracting DOS executables         Droppers         ZIP archive         ACE archive         ARC archive         AB L archive
Report Mail Shield Main Behavior	Ŧ	Packer description

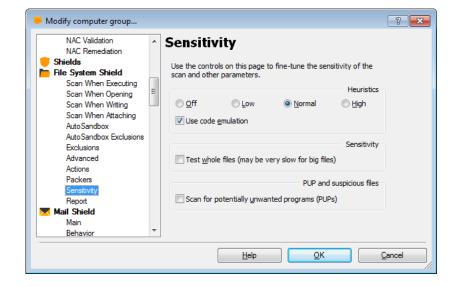
- On this page, you can specify which types of archive file are checked when scanning. Certain file types are scanned by default but you can also specify other types that should be scanned by checking the appropriate box.
- By clicking once on any of the default file types in the list, you can see a description of that particular type of file at the bottom of the page.
- If you want all archive files to be scanned, check the box "All packers", however, this may significantly increase the scanning time.

### Computer catalog

NAC Validation NAC Remediation	*	Sensitivity
Shields File System Shield Scan When Executing	m	Use the controls on this page to fine-tune the sensitivity of the scan and other parameters.
Scan When Opening Scan When Writing	=	○ Off ○ Low ○ Normal ○ High
Scan When Attaching AutoSandbox		☑ Use code emulation
AutoSandbox Exclusions		Sensitivity
Exclusions Advanced Actions		Test whole files (may be very slow for big files)
Packers		PUP and suspicious files
Sensitivity Report		Scan for potentially unwanted programs (PUPs)
Mail Shield		
Main	-	
Behavior		

- On this screen, you can adjust the basic sensitivity, which determines how thoroughly files are scanned, and also the heuristic sensitivity.
- As well as the standard process of scanning for known malware infections, avast! also performs a heuristic analysis to identify potential, but as yet unknown malware. This is done by looking for certain characteristics that may be a sign of a potential infection. By clicking on the orange bars, you can adjust the level of heuristics sensitivity to Low, Normal or High, or you can turn it off completely. Increasing the sensitivity, increases the chances are of detecting a virus but also the likelihood of "false positives".
- If you find that a large number of clean files are detected by avast! as suspicious ("false positives"), it is possible that the heuristic sensitivity is set too high. Reducing the heuristic sensitivity should result in fewer files being reported as suspicious, however this also reduces the chances of a real virus being detected.

### Computer catalog



- If the box "**use code emulation**" is checked and avast! detects some suspicious code in a file, it will attempt to run the code in a virtual environment to determine how it behaves. If potential malicious behavior is detected, it will be reported as a virus. Running the code in this virtual environment means that if the code is malicious it will not be able to cause damage to your computer.
- You can adjust the basic scan sensitivity by checking or unchecking the following boxes:
  - Test whole files (may be very slow for big files) checking this box will result in scanned files being tested fully, not just those parts of a file which are normally affected by viruses. Most viruses are normally found either at the beginning of a file, or at the end. Checking this box will therefore result in a more thorough scan, but will also slow the scan down.
  - By checking the box "Scan for potentially unwanted programs (PUPs)", you can also scan for programs which you may have downloaded unknowingly, typically programs that are used for advertising, or collecting information about your computer or internet use.

### Computer catalog

#### File System shield

NAC Validation NAC Remediation	*	Report			
Shields File System Shield Scan When Executing Scan When Opening Scan When Mriting Auto Sandbox Auto Sandbox Auto Sandbox Exclusions Advanced Actions Packers Sensitivity	m	and to specify File name None Plain te Name Name	* File type * Ext ( <u>A</u> NSI) Ext ( <u>U</u> nicode) If file exists	Reported items  Reported items  Arrors  Soft errors  GK items  Kipped items	
Report Mail Shield Main Behavior	-	Appen Overw			

On this page you can create a report of the scan results. You can specify whether you want the report to be created as a plain text file, or in XML format.

- If you want to create a new report after each scan, and you don't want to keep a record of previous scan results, select "overwrite". A new report will then be created after each scan and will replace any previous report.
- If you want to keep the previous scan results, select "Append" and the results of the new scan will be added to the end of the previous report.

### Computer catalog

### File System shield

Shields File System Shield Scan When Executing			
Scan When Opening Scan When Writing	111	use the controls below to generate and to specify the content of the rep	
Scan When Attaching AutoSandbox AutoSandbox Exclusions Exclusions Advanced Actions Packers		File type ○ <u>N</u> one ③ Plain text ( <u>A</u> NSI) ○ Plain text ( <u>U</u> nicode) ○ <u>X</u> ML If file exists	Reported items          Infected items         Hard errors         Soft errors         OK items         Skipped items
Sensitivity Feport Mail Shield Main Behavior	Ŧ	<ul> <li>● Append</li> <li>○ Qverwrite</li> </ul>	

Reported items:

- Infected items files that potentially contain a virus or other malware infection
- **Hard errors** these arise when the program detects something that would not normally be expected and generally require further investigation.
- **Soft errors** these are less serious than hard errors and usually concern files that could not be scanned, for example, because they were open and being used by another application.
- **OK items** these are files that were scanned where nothing suspicious was detected. If all local drives are scanned, checking this box could produce a very long report. It is recommended to check this box only if you intend to carry out a limited scan and only if you really want all clean files to be reported as well as any problematic files.
- **Skipped items** these are files that were not scanned as a result of the scan settings, for example, if it was specified that only files with specific extension should be scanned or if certain files were specifically excluded from the scan.

# **MAIL SHIELD**

### Computer catalog

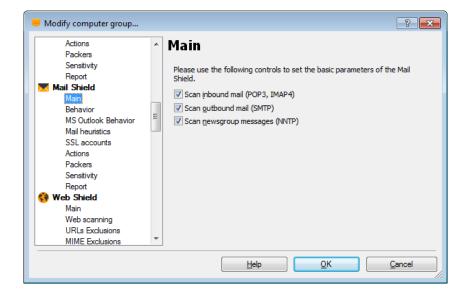
#### Mail Shield



 The Mail Shield monitors all your email traffic and scans all messages even before they reach your computer and before they have the chance to do any harm.

### Computer catalog

#### Mail Shield



- Here you can specify which type of messages are scanned i.e. messages that are:
  - received (inbound POP3,IMAP4)
  - sent (outbound SMTP)
  - newsgroup messages (NNTP)

### Computer catalog

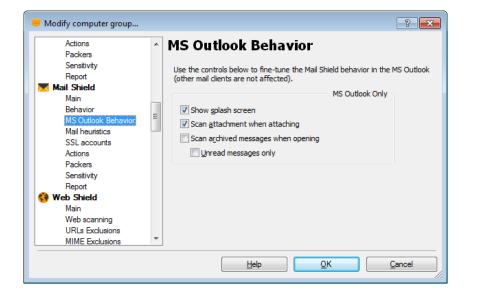
#### Mail Shield

Actions Packers	*	Behavior	
Sensitivity Report		Use the controls below to fine-tune the Mail Shield behavior.	
Mail Shield Main Behavior MS Outlook Behavior Mail heuristics SSL accounts	III	<ul> <li>☐ Insert note into glean message (incoming)</li> <li>☐ Insert note into infected message (incoming)</li> <li>☐ Insert note into clean message (outgoing)</li> <li>☑ Mark in subject of mail containing a virus:</li> <li>*** VIRUS ***</li> </ul>	General
Actions Packers Sensitivity Report		Wark in subject of suspicious mail:	
Web Shield Main Web scanning URLs Exclusions MIME Exclusions			

- Use the controls below to the finetune the Mail Shield behavior
- You can insert a note into
  - Clean messages
  - Infected messages
- You can add a mark into the subject of mail containing a virus
- Or you can add a mark in the subject of suspicious mails

## Computer catalog

### Mail Shield



• MS Outlook only

- Show splash screen if this box is checked, the avast! splash screen will be displayed briefly whenever MS Outlook is launched, to confirm that the Mail Shield is running.
- Scan attachment when attaching here you can specify that attachments should be scanned at the time they are attached, rather than when they are sent.
- Scan archived messages when opening by default messages that have been archived are not scanned. By checking this box, you can ensure that even archive messages are scanned.
  - However, you can also specify that this will only apply to unread messages, by checking the "unread messages only" box.

## Computer catalog

Actions Packers	*	Mail heuristics
Sensitivity Report Mail Shield Main Behavior MS Outlook Behavior Mail heunstice SSL accounts Actions Packers Sensitivity Report Web Shield Main Web scanning URLs Exclusions MIME Exclusions	III III III III III III III III III II	The avast! Mail Shield performs additional heuristic checks, which enables it to detect as yet unknown mass-mailing worms. Use the controls below to fine-tune the parameters of these additional heuristic checks. Check white-spaces sequence in name of attachment Count: 20 Attachment Check None Sone Content type and name/extension Name/gxtension only Local IFRAME Remote IFRAME

- Check white-spaces sequence in name of attachment
  - Some viruses add a number of spaces (or other non-displayable "white" characters) to the end of a file extension, followed by a second real extension, which would normally be recognized as a potentially dangerous extension. However, due to the length of the file name, the person receiving the email might not see the second extension and may open the attachment, believing it to be safe. The heuristic analysis uncovers this trick by looking for white-space sequences in the name of the attachment.
  - The default number of whitespaces is 20 and if the number of white-spaces exceeds this number, a warning will be displayed

## Computer catalog

Sensitivity Report Mail Shield Main Behavior MS Outlook Behavior	The avast! Mail Shield performs additional heuristic checks, which enables it to detect as yet unknown mass-mailing worms. Use the controls below to fine-tune the parameters of these additional heuristic checks.
Mail heunstice SSL accounts Actions Packers Sensitivity Report Web Shield Main	Count: 20  Attachment Check  None  Content type and name/extension  Name/extension  Local IFRAME
Web scanning URLs Exclusions MIME Exclusions	Remote IFRAME

- Attachment check if this box is checked, an analysis of the attachment will be performed based its name and extension and, optionally, its content:
  - If "name/extension only" is selected, a warning will be displayed, for example, if the attachment has a simple executable extension (EXE, COM, BAT etc). However, not all such files are dangerous and this might result in a higher number of false positive alerts - i.e. clean files identified as potentially suspicious.
  - If "Content type and name/extension" is selected, the program will additionally check that the content actually corresponds to the file type e.g. a file ending .jpg actually does contain a picture and is not a renamed COM file.
- Local iframe/Remote iframe Some viruses can exploit bugs in some mail programs that make it possible to start the virus simply be viewing the message in the preview pane. avast! checks whether the HTML code of the message contains a tag which enables it to do this and if such a tag is detected, a warning message is displayed.

## Computer catalog

## Mail Shield



A more detailed SSL settings description can be found on the avast website in the knowledge base article: http://support.avast.com/index.php?\_m=knowledgebase&\_ a=viewarticle&kbarticleid=458

## • Outgoing Mail

- The outgoing unencrypted email will first be scanned by the Mail Shield. If the type of encryption is specified on this page, a secure connection will be established and the mail will be sent encrypted to the Mail Server.
- If the type of encryption has been specified as "None", the mail will be sent unencrypted.
- If nothing is specified on this page for a particular mail account, the Mail Shield will check whether the Mail Server supports encryption. If it does, a new rule will be created automatically.

## Computer catalog

#### Mail Shield

Modify computer group		? <b>×</b>
Actions Packers Sensitivity Report	*	Actions Use the following controls to specify what actions to take when a virus, a potentially unwanted program or a suspicious file is detected.
Mail Shield		Virus PUP Suspicious
Main Behavior MS Outlook Behavior	ш	Description Move to Chest
Mail heuristics SSL accounts		If action fails, then:
Actions Packers Sensitivity Report		If action fails, then: No Action
Web Shield     Main     Web scanning     URLs Exclusions     MIME Exclusions	Ŧ	Processing of infected archives when the infected file removal fails:
		Help QK Cancel

- On this screen, you can specify the action that should be taken automatically whenever a virus, potentially unwanted program (PUP), or suspicious file is detected.
- The default action is "No action" and if this is left unchanged, any suspicious files will be reported at the end of the scan and you will have the opportunity then to deal with them individually:
  - delete them
  - move them to the virus chest
  - do nothing
- Alternatively, you can select an action which avast! will attempt to carry out automatically:
  - Repair
  - Move to Chest
  - Delete

If any action is selected, you can then specify an alternative action to be taken if the first action fails.

### Computer catalog

### Mail Shield

Actions Packers	*	Actions	
Sensitivity Report		Use the following controls to specify what a potentially unwanted program or a suspiciou	
Mail Shield Main		Virus PUP Suspicious	
Behavior		Description	
MS Outlook Behavior Mail heuristics		Move	to Chest 👻
SSL accounts		If action fails, then: Delete	•
Actions Packers		If action fails, then: No Ac	tion
Sensitivity Report		Show a notification window when action	ı is taken
Web Shield Main		Processing of infected archives when the ir	nfected file removal fails:
Web scanning		do <u>n</u> othing	
URLs Exclusions		remove the whole containing archive	
MIME Exclusions	*		
		Help	OK Cancel

• Options:

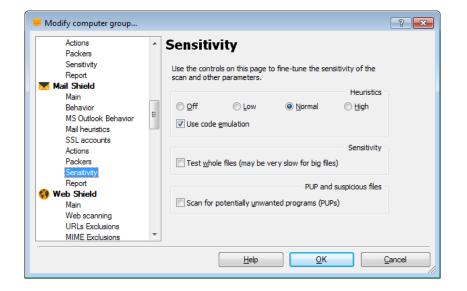
- If necessary, perform the selected action at the next system restart. If this box is checked and the action could not be completed, avast! will attempt to carry out the action again the next time the computer is restarted. This could happen, for example where a file was in use and could not be deleted or moved.
- Finally there are additional options for dealing with infected archives:
  - By default, if an infected file is discovered in an archive file, avast! will attempt to remove it.
  - You can further specify that if the infected file cannot be removed, avast! should remove the archive (the parent archive) within which the infected file is located.
  - Alternatively, you can specify that whenever an infected file is detected inside an archive, the entire archive should always be removed.

## Computer catalog

Actions Packers	*	Packers
Sensitivity Report Mail Shield Main		Please select which archive (packer) files avast! should attempt to unpack during the scanning process. Packers
Main Behavior MS Outlook Behavior	=	☑ All Packers
Mail heuristics		Self-extracting DOS executables
SSL accounts		Self-extracting Win32 executables Droppers
Actions		7ZIP archive
Packers		ACE archive
Sensitivity Report		ARC archive
Web Shield		T AR Larchive
Main		Packer description
Web scanning		
URLs Exclusions		
MIME Exclusions	Ŧ	
		Help OK Cancel

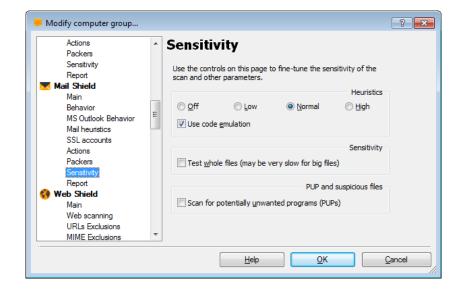
- On this page, you can specify which types of archive file are checked when scanning. Certain file types are scanned by default but you can also specify other types that should be scanned by checking the appropriate box.
- By clicking once on any of the default file types in the list, you can see a description of that particular type of file at the bottom of the page.
- If you want all archive files to be scanned, check the box "All packers", however, this may significantly increase the scanning time.

### Computer catalog



- On this screen, you can adjust the basic sensitivity, which determines how thoroughly files are scanned, and also the heuristic sensitivity.
- As well as the standard process of scanning for known malware infections, avast! also performs a heuristic analysis to identify potential, but as yet unknown malware. This is done by looking for certain characteristics that may be a sign of a potential infection. By clicking on the orange bars, you can adjust the level of heuristics sensitivity to Low, Normal or High, or you can turn it off completely. Increasing the sensitivity, increases the chances are of detecting a virus but also the likelihood of "false positives".
- If you find that a large number of clean files are detected by avast! as suspicious ("false positives"), it is possible that the heuristic sensitivity is set too high. Reducing the heuristic sensitivity should result in fewer files being reported as suspicious, however this also reduces the chances of a real virus being detected.

### Computer catalog



- If the box "use code emulation" is checked and avast! detects some suspicious code in a file, it will attempt to run the code in a virtual environment to determine how it behaves. If potential malicious behavior is detected, it will be reported as a virus. Running the code in this virtual environment means that if the code is malicious it will not be able to cause damage to your computer.
- You can adjust the basic scan sensitivity by checking or unchecking the following boxes:
  - Test whole files (may be very slow for big files) checking this box will result in scanned files being tested fully, not just those parts of a file which are normally affected by viruses. Most viruses are normally found either at the beginning of a file, or at the end. Checking this box will therefore result in a more thorough scan, but will also slow the scan down.
  - By checking the box "Scan for potentially unwanted programs (PUPs)", you can also scan for programs which you may have downloaded unknowingly, typically programs that are used for advertising, or collecting information about your computer or internet use.

## Computer catalog

#### Mail Shield

Actions Packers Sensitivity	*	Report			
Report			s below to generate the content of the re	a report of the scan result,	
Mail Shield				port	
Main		File name	*		
Behavior MS Outlook Behavior Mail heuristics SSL accounts Actions Packers Sensitivity Report Web Shield Main	III	<ul> <li>None</li> <li>Plain te</li> <li>Plain te</li> <li>XML</li> <li>Appen</li> <li>Overw</li> </ul>	If file exists	Reported items          Infected items         Hard errors         Soft errors         OK items         Skipped items	
Web scanning URLs Exclusions MIME Exclusions	Ŧ		Help	ок	Cancel

On this page you can create a report of the scan results. You can specify whether you want the report to be created as a plain text file, or in XML format.

- If you want to create a new report after each scan, and you don't want to keep a record of previous scan results, select "overwrite". A new report will then be created after each scan and will replace any previous report.
- If you want to keep the previous scan results, select "Append" and the results of the new scan will be added to the end of the previous report.

#### Computer catalog

### Mail Shield

Actions Packers Sensitivity	*	Report	s below to generate :	a report of the scan result,	
Report			the content of the re		
Mail Shield		File name	*		
Behavior MS Outlook Behavior Mail heuristics SSL accounts Actions Packers Sensitivity Report Web Shield	III	None     Plain te     Plain te     XML     XML     Appen	ext (Unicode)	Reported items	
Main Web scanning URLs Exclusions MIME Exclusions	-	<ul> <li>Appendix</li> <li>Qverw</li> </ul>			

Reported items:

- Infected items files that potentially contain a virus or other malware infection
- **Hard errors** these arise when the program detects something that would not normally be expected and generally require further investigation.
- **Soft errors** these are less serious than hard errors and usually concern files that could not be scanned, for example, because they were open and being used by another application.
- **OK items** these are files that were scanned where nothing suspicious was detected. If all local drives are scanned, checking this box could produce a very long report. It is recommended to check this box only if you intend to carry out a limited scan and only if you really want all clean files to be reported as well as any problematic files.
- **Skipped items** these are files that were not scanned as a result of the scan settings, for example, if it was specified that only files with specific extension should be scanned or if certain files were specifically excluded from the scan.

## **WEB SHIELD**

### Computer catalog

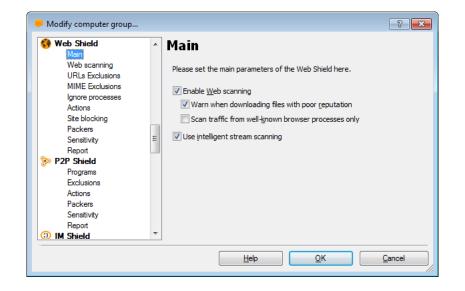
#### Web Shield



• The Web Shield scrutinizes all your web browsing activities, and eliminates any online threats even before your browser sees them.

## Computer catalog

#### Web Shield



## Enable Web scanning

 this box is checked by default. By unchecking this box, you can turn off the web scanning feature without affecting the URL blocking, which will remain active

## • Use intelligent stream scanning

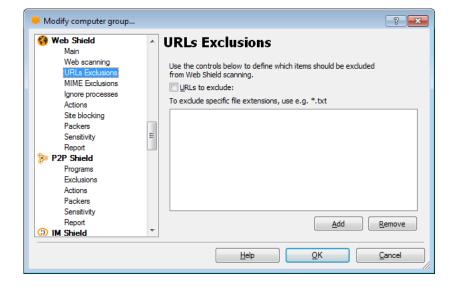
 this is also checked by default. When checked, files that are downloaded are scanned in real-time i.e. during the actual download process. The packets of data are scanned as soon as they arrive - and the next ones are downloaded only when the previous packets have been verified to be infection-free. If this feature is disabled, by unchecking the box, the whole file will be downloaded to a temporary folder first and then scanned

## Computer catalog

Web Shield	^	Web scanning
Web scanning URLs Exclusions MIME Exclusions Ignore processes Actions Site blocking		Use the controls below to define which items should be scanned while they are being downloaded from the web.
Packers	=	○ Scan selected file types only
Sensitivity Report	=	Scan files with these extensions:
P2P Shield		Add
Programs		
Exclusions		Remove
Actions		and files of the following MIME-types:
Packers		Add
Sensitivity		
Report IM Shield	-	Remove
J IM Shield		

- On this page you can specify which files should be scanned when they are downloaded from the internet.
   You can specify that all files should be scanned, or just those with particular extensions. For this feature to be active, the "Enable web scanning" box should be checked on the Main Settings page.
- You can also enter the MIME types of files that should be scanned. In both cases, wildcards can be used.

## Computer catalog



- On this page you can specify URLs that should not be scanned by the Web shield.
- URLs to exclude: Use the "add" button to enter the URL addresses that should be ignored
  - Single page: http://www.yahoo.com/index.ht
  - Whole domain: http://www.yahoo.com/\*

## Computer catalog

Web scanning       Use the controls below to define which items should be excluded from Web Shield scanning.         Imme Exclusions       Imme Exclusions         Ignore processes       Actions         Site blocking       Packers         Packers       E         Scusions       E         Actions       E         Scusions       E         Actions       E         Sensitivity       E         Packers       E         Sensitivity       E         Packers       E         Sensitivity       E	Web Shield	*	MIME Exclusions
Sensitivity	Web scanning URLs Exclusions MIME Exclusions Ignore processes Actions Site blocking Packers Sensitivity Report P2P Shield Programs Exclusions Actions	m	from Web Shield scanning.
	Sensitivity		
	Report IM Shield	-	<u>A</u> dd <u>R</u> emove

- On this page you can specify MIME types that should not be scanned by the Web shield.
- MIME types to exclude: Here you can specify any MIME types/sub-types that should not be scanned.

### Computer catalog

#### Web Shield

😚 Web Shield	*	Ignore processes
Main Web scanning		
URLs Exclusions		Use the controls below to define which items should be excluded from Web Shield scanning,
MIME Exclusions		
Ignore processes		Processes to exclude:
Actions		
Site blocking		
Packers		
Sensitivity	≡	
Report		
핟 P2P Shield		
Programs		
Exclusions		
Actions		
Packers		
Sensitivity		
Report	-	<u>A</u> dd <u>R</u> emove
IM Shield	*	
		Help OK Cancel

• Use the controls below to define which items should be excluded from the web Shield scanning.

## Computer catalog

Web Shield	~	Actions
Web scanning URLs Exclusions		Use the following controls to specify what actions to take when a virus, a potentially unwanted program or a suspicious file is detected.
MIME Exclusions Ignore processes		Virus PUP Suspicious
Actions Site blocking		Description
Packers		Abort connection
Sensitivity	=	
Report		
P2P Shield		
Programs		Show a notification window when action is taken
Exclusions		Show a nouncation window when action is taken
Actions		
Packers		
Sensitivity		
Report	-	
IM Shield	+	
		Help OK Cancel

- On this screen, you can specify the action that should be taken automatically whenever a virus, potentially unwanted program (PUP), or suspicious file is detected.
- The default action is "Abort connection" and if this is left unchanged, any suspicious connection will be aborted.
- Show a notification window when action is taken
  - If this box is checked, you will see a message on the screen telling you when the specified action has been taken.

## Computer catalog

#### Web Shield

😚 Web Shield Main	*	Site blocking
Web scanning URLs Exclusions MIME Exclusions		On this page avast! enables you to block access to specific websites/URLs. Please use the controls below to specify websites/URLs that should be blocked.
Ignore processes		Enable site blocking
Actions Site blocking		URLs to block
Packers		
Sensitivity	Ξ	
Report		
🐎 P2P Shield		
Programs		
Exclusions		
Actions		
Packers		
Sensitivity		
Report	-	<u>A</u> dd <u>R</u> emove
IM Shield		

 On this page avast! Enables you to block access to specific websites/URLs. Please use the controls below tospecify websites/URLs that should be blocked.

## Computer catalog

Web Shield	*	Packers
Web scanning URLs Exclusions MIME Exclusions		Please select which archive (packer) files avast! should attempt to unpack during the scanning process.
Ignore processes Actions		All Packers
Site blocking Packers Senstivity Report P2P Shield Programs Exclusions Actions	ш	Self-extracting DOS executables Self-extracting Win32 executables TOPOPPER ACE archive ACE archive ARC archive ART archive
Packers Sensitivity Report	-	Packer description
IM Shield		

- On this page, you can specify which types of archive file are checked when scanning. Certain file types are scanned by default but you can also specify other types that should be scanned by checking the appropriate box.
- By clicking once on any of the default file types in the list, you can see a description of that particular type of file at the bottom of the page.
- If you want all archive files to be scanned, check the box "All packers", however, this may significantly increase the scanning time.

## Computer catalog

Web Shield Main	*	Sensitivity
Web scanning URLs Exclusions MIME Exclusions		Use the controls on this page to fine-tune the sensitivity of the scan and other parameters.
Ignore processes Actions		© Off ○ Low
Site blocking Packers		✓ Use code <u>e</u> mulation
Sensitivity Report	ш	Sensitivity
P2P Shield Programs		Test whole files (may be very slow for big files)
Exclusions		PUP and suspicious files
Packers Sensitivity		Scan for potentially unwanted programs (PUPs)
Report IM Shield	-	

- On this screen, you can adjust the basic sensitivity, which determines how thoroughly files are scanned, and also the heuristic sensitivity.
- As well as the standard process of scanning for known malware infections, avast! also performs a heuristic analysis to identify potential, but as yet unknown malware. This is done by looking for certain characteristics that may be a sign of a potential infection. By clicking on the orange bars, you can adjust the level of heuristics sensitivity to Low, Normal or High, or you can turn it off completely. Increasing the sensitivity, increases the chances are of detecting a virus but also the likelihood of "false positives".
- If you find that a large number of clean files are detected by avast! as suspicious ("false positives"), it is possible that the heuristic sensitivity is set too high. Reducing the heuristic sensitivity should result in fewer files being reported as suspicious, however this also reduces the chances of a real virus being detected.

### Computer catalog

Web Shield Main Web scanning URLs Exclusions MIME Exclusions	*	Sensitivity Use the controls on this page to fine-tune the sensitivity of the scan and other parameters.
Ignore processes Actions Site blocking Packers		Heuristics ◯ Qff ◯ Low ⑧ Normal ◯ High ☑ Use code emulation
Sensitivity Report P2P Shield	ш	Sensitivity
Programs Exclusions Actions Packers Sensitivity		PUP and suspicious files
Beport	-	

- If the box "use code emulation" is checked and avast! detects some suspicious code in a file, it will attempt to run the code in a virtual environment to determine how it behaves. If potential malicious behavior is detected, it will be reported as a virus. Running the code in this virtual environment means that if the code is malicious it will not be able to cause damage to your computer.
- You can adjust the basic scan sensitivity by checking or unchecking the following boxes:
  - Test whole files (may be very slow for big files) checking this box will result in scanned files being tested fully, not just those parts of a file which are normally affected by viruses. Most viruses are normally found either at the beginning of a file, or at the end. Checking this box will therefore result in a more thorough scan, but will also slow the scan down.
  - By checking the box "Scan for potentially unwanted programs (PUPs)", you can also scan for programs which you may have downloaded unknowingly, typically programs that are used for advertising, or collecting information about your computer or internet use.

## Computer catalog

#### Web Shield

Web Shield	*	Report	
Web scanning URLs Exclusions MIME Exclusions Ignore processes		Use the controls below to generate a report of th and to specify the content of the report. File name	e scan result,
Actions Site blocking Packers Sensitivity P2P Shield Programs Exclusions Actions Packers Sensitivity	ш	File type         Infecte         Plain text (ANSI)         Hard et         Plain text (Unicode)         Soft er         ML         If file exists         Append         Overwrite	rrors nos
Report <b>IM Shield</b>	*	Help OK	Cancel

On this page you can create a report of the scan results. You can specify whether you want the report to be created as a plain text file, or in XML format.

- If you want to create a new report after each scan, and you don't want to keep a record of previous scan results, select "overwrite". A new report will then be created after each scan and will replace any previous report.
- If you want to keep the previous scan results, select "Append" and the results of the new scan will be added to the end of the previous report.

#### Computer catalog

#### Web Shield

Web Shield	^	Report	
Web scanning URLs Exclusions MIME Exclusions Ignore processes		Use the controls below to generate a report of the scan result, and to specify the content of the report.	
Actions Site blocking Packers Sensitivity Report P2P Shield Programs Exclusions Actions Packers Sensitivity		File type       Reported items <ul> <li>Mone</li> <li>Plain text (ANSI)</li> <li>Plain text (Unicode)</li> <li>XML</li> <li>Soft errors</li> <li>Skipped items</li> </ul> If file exists         Append         Overwrite	
Report IM Shield	Ŧ		

Reported items:

- Infected items files that potentially contain a virus or other malware infection
- **Hard errors** these arise when the program detects something that would not normally be expected and generally require further investigation.
- **Soft errors** these are less serious than hard errors and usually concern files that could not be scanned, for example, because they were open and being used by another application.
- **OK items** these are files that were scanned where nothing suspicious was detected. If all local drives are scanned, checking this box could produce a very long report. It is recommended to check this box only if you intend to carry out a limited scan and only if you really want all clean files to be reported as well as any problematic files.
- **Skipped items** these are files that were not scanned as a result of the scan settings, for example, if it was specified that only files with specific extension should be scanned or if certain files were specifically excluded from the scan.

# **P2P SHIELD**

## Computer catalog

#### P2P Shield

For Colusions       Exclusions         Actions       Packers         Senstivity       Programs         Programs       Exclusions         Actions       Image: Column Stress Stress         Programs       Exclusions         Actions       E         Packers       E         Sensitivity       Report         Programs       E         Sensitivity       Report         Network Shield       Script Shield         Main       Exclusions         Report       The P2P Shield	P2P Shield Programs	^	P2P Shield
Exclusions Actions Packers Sensitivity Report Network Shield Script Shield Main Exclusions	Ecclusions Actions Packers Sensitivity Report IM Shield		eliminating the security risks associated with these types of programs.
Script Shield Main Exclusions	Exclusions Actions Packers Sensitivity Report	ш	
	Script Shield Main		
		-	

 The P2P Shield monitors downloads from most P2P applications, vastly eliminating the security risks associated with these types of progams.

## Computer catalog

P2P Shield Programs	*	Programs	
Exclusions Actions		Select the P2P programs for which downloaded files should be scanned:	
Packers		Kazaa	]
Sensitivity		V Kazaa Lite	1
Report IM Shield		V Direct Connect	
Programs		▼ Direct Connect++	
Exclusions		V BearShare	
Actions		▼ iMesh	-
Packers	=	WinMX	
Sensitivity		☑ LineWire	
Report		Bit Torrent	
Network Shield		V Overnet	
Script Shield		🔽 Shareaza	
Main		CZDC++	
Exclusions	-	V Morpheus 👻	-
Report	*		-

- Select the P2P programs for which downloaded files should be scanned/monitored.
- You can select from a list of 31 programs.

## Computer catalog

#### P2P Shield



 Here you can modify the list of locations that will not be scanned.
 Click on any line to modify it, or click the "Add" button to add a new location.

## Computer catalog

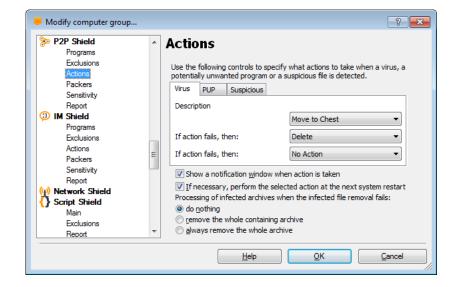
## P2P Shield

P2P Shield Programs Exclusions Actions	*	Actions Use the following controls to spi potentially unwanted program of		
Packers Sensitivity Report		Virus PUP Suspicious Description		
IM Shield     Programs     Exclusions		If action fails, then:	Move to Chest	•
Actions Packers	=	If action fails, then:	No Action	<b>•</b>
Sensitivity Report V Network Shield Script Shield		Show a notification window If necessary, perform the s Processing of infected archives	selected action at the next sy	
Main Exclusions Report	Ţ	o do nothing remove the whole containing always remove the whole a	-	

- On this screen, you can specify the action that should be taken automatically whenever a virus, potentially unwanted program (PUP), or suspicious file is detected.
- The default action is "No action" and if this is left unchanged, any suspicious files will be reported at the end of the scan and you will have the opportunity then to deal with them individually:
  - delete them
  - move them to the virus chest
  - do nothing
- Alternatively, you can select an action which avast! will attempt to carry out automatically:
  - Repair
  - Move to Chest
  - Delete

If any action is selected, you can then specify an alternative action to be taken if the first action fails.

## Computer catalog



- Options:
  - If necessary, perform the selected action at the next system restart. If this box is checked and the action could not be completed, avast! will attempt to carry out the action again the next time the computer is restarted. This could happen, for example where a file was in use and could not be deleted or moved.
- Finally there are additional options for dealing with infected archives:
  - By default, if an infected file is discovered in an archive file, avast! will attempt to remove it.
  - You can further specify that if the infected file cannot be removed, avast! should remove the archive (the parent archive) within which the infected file is located.
  - Alternatively, you can specify that whenever an infected file is detected inside an archive, the entire archive should always be removed.

## Computer catalog

P2P Shield	~	Packers
Programs Exclusions Actions Packers Sensitivity		Please select which archive (packer) files avast! should attempt to unpack during the scanning process. Packers
Report		All Packers      Self-extracting DOS executables
Programs Exclusions Actions Packers Sensitivity Report		Self-extracting Win32 executables  Droppers ZIP archive ACE archive ARC archive
Network Shield Script Shield Main		AR 1 archive Packer description
Exclusions Report	-	

- On this page, you can specify which types of archive file are checked when scanning. Certain file types are scanned by default but you can also specify other types that should be scanned by checking the appropriate box.
- By clicking once on any of the default file types in the list, you can see a description of that particular type of file at the bottom of the page.
- If you want all archive files to be scanned, check the box "All packers", however, this may significantly increase the scanning time.

## Computer catalog

P2P Shield	*	Sensitivity
Programs		-
Exclusions		Use the controls on this page to fine-tune the sensitivity of the
Actions		scan and other parameters.
Packers		Heuristics
Sensitivity		
Report		© Off © Low ◎ Normal © High
IM Shield		✓ Use code emulation
Programs		
Exclusions		
Actions	-	Sensitivity
Packers	=	Test whole files (may be very slow for big files)
Sensitivity		
Report		PUP and suspicious files
Network Shield		FOF and suspicious nies
Script Shield		Scan for potentially unwanted programs (PUPs)
Main		
Exclusions		
Report	-	

- On this screen, you can adjust the basic sensitivity, which determines how thoroughly files are scanned, and also the heuristic sensitivity.
- As well as the standard process of scanning for known malware infections, avast! also performs a heuristic analysis to identify potential, but as yet unknown malware. This is done by looking for certain characteristics that may be a sign of a potential infection. By clicking on the orange bars, you can adjust the level of heuristics sensitivity to Low, Normal or High, or you can turn it off completely. Increasing the sensitivity, increases the chances are of detecting a virus but also the likelihood of "false positives".
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## Computer catalog

	Sensitivity Use the controls on this page to fine-tune the sensitivity of the scan and other parameters.
	scan and other parameters.
	Heuristics
	Off ○ Low ◎ Normal ○ High
	✓ Use code emulation
	5
=	Sensitivity
-	Test whole files (may be very slow for big files)
	PUP and suspicious files
	Scan for potentially unwanted programs (PUPs)
	E Scarr for potentially <u>u</u> nwanted programs (POPS)
-	
	4 m

- If the box "**use code emulation**" is checked and avast! detects some suspicious code in a file, it will attempt to run the code in a virtual environment to determine how it behaves. If potential malicious behavior is detected, it will be reported as a virus. Running the code in this virtual environment means that if the code is malicious it will not be able to cause damage to your computer.
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  - By checking the box "Scan for potentially unwanted programs (PUPs)", you can also scan for programs which you may have downloaded unknowingly, typically programs that are used for advertising, or collecting information about your computer or internet use.

## Computer catalog

#### P2P Shield

P2P Shield Programs	*	Report			
Exclusions					
Actions			the content of the re	a report of the scan result, port.	
Packers				porti	-
Sensitivity		File name	*		
Report			File type	Reported items	
IM Shield			the type		
Programs		None		Infected items	
Exclusions	_	🔘 Plain te	ext ( <u>A</u> NSI)	Hard errors	
Actions	=	Plain te	ext ( <u>U</u> nicode)	Soft errors	
Packers	-	C XML		OK items	
Sensitivity		0.0			
Report			If file exists	Skipped items	
🖞 Network Shield					
Script Shield		Append			
Main		Overw	rite		
Exclusions					
Report	*				

On this page you can create a report of the scan results. You can specify whether you want the report to be created as a plain text file, or in XML format.

- If you want to create a new report after each scan, and you don't want to keep a record of previous scan results, select "overwrite". A new report will then be created after each scan and will replace any previous report.
- If you want to keep the previous scan results, select "Append" and the results of the new scan will be added to the end of the previous report.

### Computer catalog

## P2P Shield

P2P Shield Programs	*	Report			
Exclusions					
Actions			Is below to generate the content of the re	a report of the scan result,	
Packers		and to specify		porta	
Sensitivity		File name	*		
Report			File type	Reported items	
IM Shield			rile type		
Programs		None		Infected items	
Exclusions	_	<ul> <li>Plain text (ANSI)</li> <li>Plain text (Unicode)</li> </ul>		Hard errors	
Actions	Ξ			Soft errors	
Packers	=	C XML	- ,	OK items	
Sensitivity		0.0			
Report			If file exists	Skipped items	
Network Shield		Appen			
Script Shield					
Main		Overw	nue		
Exclusions					
Report	*				

Reported items:

- Infected items files that potentially contain a virus or other malware infection
- **Hard errors** these arise when the program detects something that would not normally be expected and generally require further investigation.
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- **Skipped items** these are files that were not scanned as a result of the scan settings, for example, if it was specified that only files with specific extension should be scanned or if certain files were specifically excluded from the scan.

# **IM SHIELD**

### Computer catalog

#### IM Shield



 The IM Shield intercepts all downloads from instant messaging applications and makes sure they are clean.

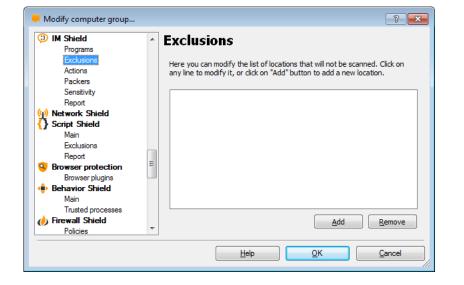
### Computer catalog

Programs       Exclusions         Actions       Select the IM programs for which downloaded files should be scanned:         Packers       Sensitivity         Report       V MSN/Windows Messenger         Script Shield       V 1CQ         Main       V 1CQ         Exclusions       AIM (AOL Instant Messenger)         Report       V mIRC         Browser protection       Miranda         Browser plugins       V Gadu-Gadu         Wain       V solution         Trusted processes       Skype         Policies       IM2 Messenger	IM Shield	•	Programs
Actions       Select the IM programs for which downloaded hies should be scanned:         Packers       Sensitivity         Report       Image: Shield         Main       Image: Script Shield         Browser protection       Image: Shield         Browser plugins       Image: Shield         Main       Image: Shield         Image: Shield       Image: Shield	2		5
Actions Packers Sensitivity Repot V MSN/Windows Messenger V Yahoo! Messenger V Yahoo! Messenger V Yahoo! Messenger V ICQ Alm (AOL Instant Messenger) E Script Shield Main Exclusions Repot Browser protection Browser plugins Browser plugins Proved Plugin Browser plugins V Odigo Behavior Shield Main Trusted processes V Firewall Shield V IMV V MIRC V MIRC V Odigo V Skype V Messenger V MSN/Windows Messenger V Minanda V gaim/Pidgin V Odigo V Skype V Messenger			Select the IM programs for which downloaded files should be scanned:
Sensitivity Report With Work Shield Script Shield Main Exclusions Report Browser plugins Behavior Shield Main Firsted processes Min Browser plugins Min Browser plugins Min Browser plugins Min Browser plugins Min Browser plugins Min Browser plugins Min Browser plugins Min Browser plugins Min Min Browser plugins Min Min Browser plugins Min Min Browser plugins Min Min Browser plugins Min Min Browser plugins Min Min Browser plugins Min Min Min Browser plugins Min Min Min Min Min Min Min Min			
Serialitvity       V       Yahoo! Messenger         Report       V       ICQ         Script Shield       V       AIM (AOL Instant Messenger)         Main       V       Trillian         Exclusions       V       minC         Report       V       Miranda         Soroyes protection       V       V         Browser plugins       V       Odigo         Behavior Shield       V       Gadu-Gadu         Main       V       Psi Jabber Client         Trusted processes       V       Skype         V       Mild       V         V       May Messenger       V			MSN Mindows Messenger
Interport       ICQ         Script Shield       Image: All (AOL Instant Messenger)         Main       Image: Trillian         Exclusions       Image: Miranda         Browser protection       Image: Miranda         Browser plugins       Image: Miranda         Image: Behavior Shield       Image: Gadu-Gadu         Main       Image: Miranda         Image: Browser plugins       Image: Gadu-Gadu         Image: Main       Image: Miranda         Image: Browser plugins       Image: Gadu-Gadu         Image: Main       Image: Miranda			
Script Shield       Image: All (AOL Instant Messenger)       Image: All (AOL Instant Messenger)         Main       Image: All (AOL Instant Messenger)       Image: All (AOL Instant Messenger)         Main       Image: All (AOL Instant Messenger)       Image: All (AOL Instant Messenger)         Browser protection       Image: All (AOL Instant Messenger)       Image: All (AOL Instant Messenger)         Browser protection       Image: All (AOL Instant Messenger)       Image: All (AOL Instant Messenger)         Browser protection       Image: All (AOL Instant Messenger)       Image: All (AOL Instant Messenger)         Browser protection       Image: All (AOL Instant Messenger)       Image: All (AOL Instant Messenger)         Image: Browser plugins       Image: All (AOL Instant Messenger)       Image: All (AOL Instant Messenger)         Image: Browser plugins       Image: All (AOL Instant Messenger)       Image: All (AOL Instant Messenger)         Image: Browser plugins       Image: All (AOL Instant Messenger)       Image: All (AOL Instant Messenger)         Image: Browser plugins       Image: All (AOL Instant Messenger)       Image: All (AOL Instant Messenger)         Image: Browser plugins       Image: All (AOL Instant Messenger)       Image: All (AOL Instant Messenger)         Image: Browser plugins       Image: All (AOL Instant Messenger)       Image: All (AOL Instant Messenger)         Image: Browser plugins       <			
Main       Image: Construction         Browser protection       Image: Construction         Image: Construction       Image: Construction         Main       Image: Construction         Trusted processes       Image: Skype         Image: Firewall Shield       Image: Messenger	(I) Network Shield		
Exclusions     Exclusions     Report     Browser protection     Browser plugins     Gehavior Shield     Main     Trusted processes     Firewall Shield     Main     Trusted Processes	Script Shield		
Report       Image: March and a state and state and a state and state and a state and	Main		Trillian
Browser protection Browser plugins       Image: Constraint of the second s	Exclusions		MIRC
Behavior Shield     Main     Trusted processes     Skype     Firewall Shield     Void Shield	Report		V Miranda
Behavior Shield     Main     Trusted processes     Skype     Firewall Shield     Image: Shield     Main     Trusted processes     Trusted processes     Main     Trusted processes     Trus	Browser protection	=	📝 gaim/Pidgin
Main V Gaud Gaud Trusted processes V Skype Firewall Shield V Messenger	Browser plugins		Odigo
Trusted processes Skype	🔹 Behavior Shield		Gadu-Gadu
Trusted processes Skype	Main		Psi Jabber Client
Firewall Shield	Trusted processes		
Policies	🥢 Firewall Shield		
	Policies	Ψ.	in the measuring of

- Here you can specify which IM programs should be monitored.
- Select the IM programs for which downloaded files should be scanned.

### Computer catalog

#### IM Shield



 Here you can modify the list of locations that will not be scanned.
 Click on any line to modify it, or click on the "Add" button to add a new location.

### Computer catalog

### IM Shield

D IM Shield	~	Actions	
Programs			
Exclusions			y what actions to take when a virus, a
Actions		potentially unwanted program or a	suspicious file is detected.
Packers		Virus PUP Suspicious	
Sensitivity			
Report		Description	
Network Shield			Move to Chest 🔹
Script Shield		The streng fields whereas	Delete 🔻
Main		If action fails, then:	Delete
Exclusions		If action fails, then:	No Action 🔻
Report	=		
Browser protection	_	Show a notification window wh	nen action is taken
Browser plugins		If necessary, perform the sele	cted action at the next system restart
Behavior Shield			hen the infected file removal fails:
Main		O do nothing	
Trusted processes		remove the whole containing a	archive
Firewall Shield	-	always remove the whole arch	
Policies			

- On this screen, you can specify the action that should be taken automatically whenever a virus, potentially unwanted program (PUP), or suspicious file is detected.
- The default action is "No action" and if this is left unchanged, any suspicious files will be reported at the end of the scan and you will have the opportunity then to deal with them individually:
  - delete them
  - move them to the virus chest
  - do nothing
- Alternatively, you can select an action which avast! will attempt to carry out automatically:
  - Repair
  - Move to Chest
  - Delete

If any action is selected, you can then specify an alternative action to be taken if the first action fails.

### Computer catalog

Programs	^	Actions	
Exclusions Actions Packers		Use the following controls to spec potentially unwanted program or	cify what actions to take when a virus, a a suspicious file is detected.
Sensitivity		Virus PUP Suspicious	
Report		Description	
Network Shield Script Shield			Move to Chest 🔹
Main		If action fails, then:	Delete 🔹
Exclusions Report		If action fails, then:	No Action 💌
Browser protection Browser plugins	=	Show a notification window v	when action is taken
Behavior Shield Main			elected action at the next system restart when the infected file removal fails:
Trusted processes		Odo nothing	
Firewall Shield		remove the whole containing	-
Policies	-	<u>a</u> lways remove the whole are	chive

- Options:
  - If necessary, perform the selected action at the next system restart. If this box is checked and the action could not be completed, avast! will attempt to carry out the action again the next time the computer is restarted. This could happen, for example where a file was in use and could not be deleted or moved.
- Finally there are additional options for dealing with infected archives:
  - By default, if an infected file is discovered in an archive file, avast! will attempt to remove it.
  - You can further specify that if the infected file cannot be removed, avast! should remove the archive (the parent archive) within which the infected file is located.
  - Alternatively, you can specify that whenever an infected file is detected inside an archive, the entire archive should always be removed.

### Computer catalog

Discussion (1997)	*	Packers
Programs Exclusions Actions Packers		Please select which archive (packer) files avast! should attempt to unpack during the scanning process.
Sensitivity Report		All Packers
<ul> <li>Network Shield</li> <li>Script Shield</li> <li>Main</li> <li>Exclusions</li> <li>Report</li> <li>Browser protection</li> <li>Browser plugins</li> <li>Behavior Shield</li> </ul>	Ш	Self-extracting DOS executables          Self-extracting Win32 executables          Droppers          7ZIP archive          ACE archive          ARC archive          API archive
Main Trusted processes		Packer description
Firewall Shield Policies	-	
		Help OK Cancel

- On this page, you can specify which types of archive file are checked when scanning. Certain file types are scanned by default but you can also specify other types that should be scanned by checking the appropriate box.
- By clicking once on any of the default file types in the list, you can see a description of that particular type of file at the bottom of the page.
- If you want all archive files to be scanned, check the box "All packers", however, this may significantly increase the scanning time.

### Computer catalog

IM Shield	~	Sensitivity
Programs		
Exclusions		Use the controls on this page to fine-tune the sensitivity of the
Actions		scan and other parameters.
Packers		Heuristics
Sensitivity		
Report		© Off © Low
🖞 Network Shield		✓ Use code emulation
Script Shield		Se code <u>e</u> ndiadon
Main		
Exclusions	_	Sensitivity
Report		Test whole files (may be very slow for big files)
Browser protection	=	
Browser plugins		PUP and suspicious files
Behavior Shield		
Main		Scan for potentially unwanted programs (PUPs)
Trusted processes		
🍌 Firewall Shield		
Policies	-	

- On this screen, you can adjust the basic sensitivity, which determines how thoroughly files are scanned, and also the heuristic sensitivity.
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- If you find that a large number of clean files are detected by avast! as suspicious ("false positives"), it is possible that the heuristic sensitivity is set too high. Reducing the heuristic sensitivity should result in fewer files being reported as suspicious, however this also reduces the chances of a real virus being detected.

### Computer catalog

IM Shield	~	Sensitivity
Programs Exclusions		
Actions		Use the controls on this page to fine-tune the sensitivity of the
Packers		scan and other parameters.
Sensitivity		Heuristics
Report		Off Low Ormal High
(v) Network Shield		
Script Shield		✓ Use code <u>e</u> mulation
Main		
Exclusions		Sensitivity
Report		Test whole files (may be very slow for big files)
Browser protection	=	
Browser plugins		PUP and suspicious files
🔹 Behavior Shield		
Main		Scan for potentially <u>u</u> nwanted programs (PUPs)
Trusted processes		
🌔 Firewall Shield	-	
Policies	•	
Policies	*	

- If the box "use code emulation" is checked and avast! detects some suspicious code in a file, it will attempt to run the code in a virtual environment to determine how it behaves. If potential malicious behavior is detected, it will be reported as a virus. Running the code in this virtual environment means that if the code is malicious it will not be able to cause damage to your computer.
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  - Test whole files (may be very slow for big files) checking this box will result in scanned files being tested fully, not just those parts of a file which are normally affected by viruses. Most viruses are normally found either at the beginning of a file, or at the end. Checking this box will therefore result in a more thorough scan, but will also slow the scan down.
  - By checking the box "Scan for potentially unwanted programs (PUPs)", you can also scan for programs which you may have downloaded unknowingly, typically programs that are used for advertising, or collecting information about your computer or internet use.

### Computer catalog

#### IM Shield

*	Report		
	•		
	Use the controls below to gener	rate a report of the scan result,	
	and to specify the content of the	ne report.	
	-1 *		
	File name		
	File tvr	Reported items	
	<u>N</u> one	Infected items	
	Plain text (ANSI)	Hard errors	
_	Plain text (Unicode)	Soft errors	
	C XMI		
=	0 8 4		
	If flo ovic	Skipped items	
	_		
	Overwrite		
	Ш	Use the controls below to gener and to specify the content of th File name * File ty © <u>None</u> © Plain text ( <u>A</u> NSI) © Plain text ( <u>U</u> nicode) © <u>X</u> ML	Use the controls below to generate a report of the scan result, and to specify the content of the report. File name * File type Plain text (ANSI) Plain text (ANSI) Plain text (ANSI) Plain text (Unicode) XML If file exists Skipped Items Skipped

On this page you can create a report of the scan results. You can specify whether you want the report to be created as a plain text file, or in XML format.

- If you want to create a new report after each scan, and you don't want to keep a record of previous scan results, select "overwrite". A new report will then be created after each scan and will replace any previous report.
- If you want to keep the previous scan results, select "Append" and the results of the new scan will be added to the end of the previous report.

### Computer catalog

#### IM Shield

IM Shield Programs	*	Report	
Exclusions			
Actions		Use the controls below to generate a report of the scan res and to specify the content of the report.	ult,
Packers		and to specify the content of the report.	
Sensitivity		File name *	
Report		File hore Described	
()) Network Shield		File type Reported	items
Script Shield		None Infected items	
Main		Plain text (ANSI)	
Exclusions		Plain text (Unicode)	
Report	=	○ XML OK items	
Browser protection	=		
Browser plugins		If file exists	
Behavior Shield		Append	
Main		Overwrite	
Trusted processes		C Drennie	
() Firewall Shield	-		
Policies			
		Нер ОК	Cancel

Reported items:

- Infected items files that potentially contain a virus or other malware infection
- **Hard errors** these arise when the program detects something that would not normally be expected and generally require further investigation.
- **Soft errors** these are less serious than hard errors and usually concern files that could not be scanned, for example, because they were open and being used by another application.
- **OK items** these are files that were scanned where nothing suspicious was detected. If all local drives are scanned, checking this box could produce a very long report. It is recommended to check this box only if you intend to carry out a limited scan and only if you really want all clean files to be reported as well as any problematic files.
- **Skipped items** these are files that were not scanned as a result of the scan settings, for example, if it was specified that only files with specific extension should be scanned or if certain files were specifically excluded from the scan.

# **NETWORK SHIELD**

### Computer catalog

#### **Network Shield**

Sensitivity Report Network Shield Script Shield Main Exclusions Report Browser protection Browser plugins Behavior Shield Main Trusted processes Firewall Shield Policies	III	to infect your system via the network. It also blocks access to known malicious websites.
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----	----------------------------------------------------------------------------------------------

 Provides protection against networkbased viruses. This module has two main components: a URL blocker, designed to block malicious URLs (as defined by the Virus Lab), and a lightweight intrusion-detection system.

# **SCRIPT SHIELD**

### Computer catalog

#### Script Shield

Main Exclusions Report Browser protection		The Script shield intercepts all scripts executed on your system (both local and remote).
Browser plugins Behavior Shield Main Trusted processes Firewall Shield Policies		
Network profiles Packet rules Application rules	=	
Antispam Shield Main Main (optional) Whitelist	+	

 Detects malicious scripts hidden in internet web pages and prevents them from running and hijacking or potentially causing damage to your computer.

### Computer catalog

### Script Shield

Main       Please set the main parameters of the Script Shield here.         Report       Internet Explorer         Browser protection       Image: Constraint of the script Shield here.         Browser plugins       Image: Constraint of the script Shield here.         Behavior Shield       Image: Constraint of the script Shield here.         Main       Image: Constraint of the script Shield here.         Main       Image: Constraint of the script Shield here.         Image: Constraint of the script Shield here.       Image: Constraint of the script Shield here.         Main       Image: Constraint of the script Shield here.         Policies       Image: Constraint of the script Shield here.         Network profiles       Image: Constraint of the script Shield here.         Policies       Image: Constraint of the script Shield here.         Main       Image: Constraint of the script Shield here.         Main (optional)       Image: Constraint o	Network Shield     Script Shield	*	Main
Browser protection Browser plugins       Internet Explorer         Browser plugins       Mozilla Eirefox         Behavior Shield Main Trusted processes       Internet Explorer         Policies Policies Network profiles Packet rules Application rules       Internet Explorer         Adobe Acrobat Reader       Internet Explorer         Main Packet rules Application rules       Internet Explorer         Main Main Main (optional)       Internet Explorer	3		Please set the main parameters of the Script Shield here.
Boowser protection         Browser plugins         Browser plugins         Image: Straight of the	Report		
Behavior Shield     Main     Trusted processes     Firewall Shield     Policies     Network profiles     Packet rules     Application rules     Antispam Shield     Main	Browser protection		
Main       Image: Constraint of the second se	Browser plugins		🔽 Mozilla <u>F</u> irefox
Trusted processes  Frewall Shield  Policies  Network profiles  Packet rules  Application rules  Antispam Shield  Main  Main (optional)	Behavior Shield		✓ Google Chrome
Trusted processes  Firewall Shield  Policies  Network profiles  Packet rules  Application rules  Antispam Shield  Main  Main (optional)	Main		Adobe Acrobat Reader
Piciewall Shield     ————————————————————————————————————	Trusted processes		
Network profiles Packet rules Application rules Antispam Shield Main Main (optional)	🍌 Firewall Shield		<u>v</u> <u>O</u> ther
Packet rules Application nules Application nules Antispam Shield Main Main (optional)	Policies		
Application rules Application rules Application rules Main Main Main (optional)	Network profiles		
Antispam Shield       Main       Main (optional)	Packet rules	=	
Main Main (optional)	Application rules		
Main Main (optional)	Antispam Shield		
	Main (optional)		
		Ŧ	

• You can select which browsers should be protected by Script Shield...

### Computer catalog

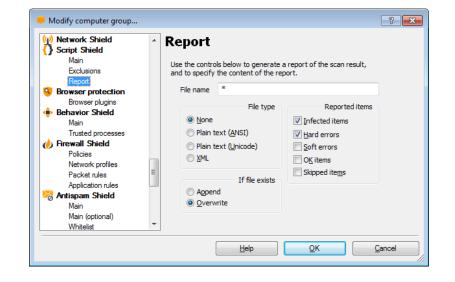
### Script Shield

(···) Network Shield	^	Exclusions
Main		Enter locations to be excluded from scanning.
Exclusions Report		URLs to exclude:
Browser protection		
Browser plugins		
Behavior Shield		
Main		
Trusted processes		
🄶 Firewall Shield		
Policies		
Network profiles		
Packet rules	=	
Application rules		
😽 Antispam Shield		
Main		
Main (optional)		<u>A</u> dd <u>R</u> emove
Whitelist	*	

• and here you can specify any URLs that should not be scanned.

### Computer catalog

#### Script Shield



On this page you can create a report of the scan results. You can specify whether you want the report to be created as a plain text file, or in XML format.

- If you want to create a new report after each scan, and you don't want to keep a record of previous scan results, select "overwrite". A new report will then be created after each scan and will replace any previous report.
- If you want to keep the previous scan results, select "Append" and the results of the new scan will be added to the end of the previous report.

### Computer catalog

### Script Shield



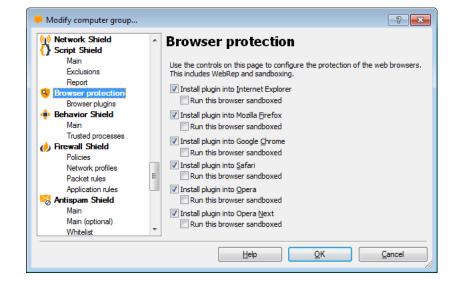
#### Reported items:

- Infected items files that potentially contain a virus or other malware infection
- **Hard errors** these arise when the program detects something that would not normally be expected and generally require further investigation.
- **Soft errors** these are less serious than hard errors and usually concern files that could not be scanned, for example, because they were open and being used by another application.
- **OK items** these are files that were scanned where nothing suspicious was detected. If all local drives are scanned, checking this box could produce a very long report. It is recommended to check this box only if you intend to carry out a limited scan and only if you really want all clean files to be reported as well as any problematic files.
- **Skipped items** these are files that were not scanned as a result of the scan settings, for example, if it was specified that only files with specific extension should be scanned or if certain files were specifically excluded from the scan.

# **BROWSER PROTECTION**

### Computer catalog

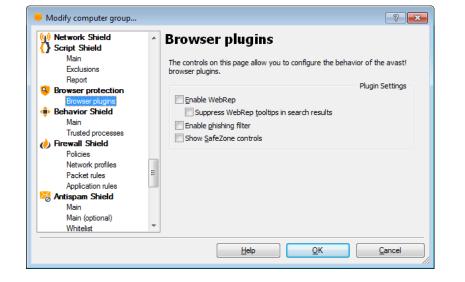
#### **Browser Protection**



 Use the controls on this page to configure the additional web browser plug-ins (such as the avast WebRep) and whether they should be run automatically in the Sandbox.

### Computer catalog

#### **Browser Protection**

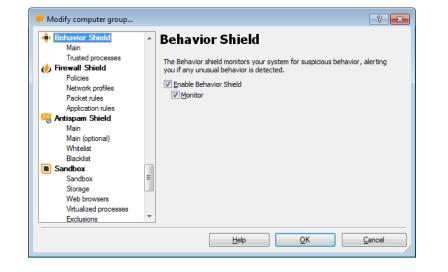


- The controls on this page allow you to configure the behavior of the avast! Browser plugins.
  - WebRep
  - Phishing filter
  - Safezone controls

# **BEHAVIOR SHIELD**

### Computer catalog

#### **Behavior Shield**

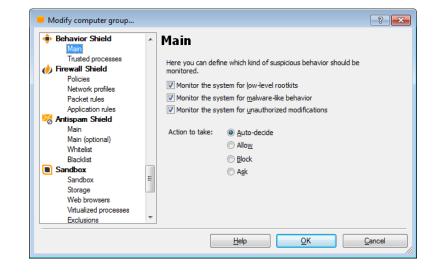


### • Behavior shield – real-time shields

 Monitors activity on your computer using a number of sensors (file system, registry and network based) and reports/blocks any suspicious behavior.

### Computer catalog

#### **Behavior Shield**



The Behavior shield can monitor your system for:

- low-level rootkits
- malware-like behavior
- unauthorized modifications

And you can specify the response if such a potential threat is detected, e.g. whether it is allowed or blocked.

### Computer catalog

#### **Behavior Shield**

Behavior Shield Main	*	Trusted processes
Trusted processes		Here you can specify which processes should not be monitored.
Policies		
Network profiles		
Packet rules		
Application rules		
Antispam Shield		
Main		
Main (optional)		
Whitelist		
Blacklist		
Sandbox		
Sandbox	=	
Storage		
Web browsers		
Virtualized processes		Add Remove
Exclusions		

- Here you can specify which processes should not be monitored.
- Browse the harddrive to locate \*.exe file/s which is then treated as a trusted application.

# **FIREWALL SHIELD**

### Computer catalog

#### **Firewall Shield**

Firewall Shield     Policies	*	Firewall Shield
Network profiles Packet rules		The controls on this page enable you to set the parameters of the
Application rules		firewall. I Enable Firewall
Antispam Shield		Monitor
Main (optional)		
Whitelist		
Blacklist		
Sandbox		
Sandbox		
Storage		
Web browsers		
Virtualized processes	Ξ	
Exclusions		
Internet access		
Report	-	
		Help OK Cancel

- Stops hackers, using heuristic and behavioral analysis and a white list of safe applications.
  - Blocks hacker attacks
  - Secures sensitive data
  - Secures identity information

### Computer catalog

#### **Firewall Shield**

🄶 Firewall Shield	*	Policies
<ul> <li>Policies</li> <li>Network profiles</li> <li>Packet rules</li> <li>Application rules</li> <li>Antispam Shield</li> <li>Main</li> <li>Main (optional)</li> <li>Whitelist</li> <li>Blacklist</li> </ul>		The controls on this page enable you to set the parameters of the firewall.  Default Rules  Auto-decide  Work/Medium Risk Zone  Auto-decide  Public/High Risk Zone
Sandbox     Sandbox     Storage     Web browsers     Virtualized processes     Exclusions     Internet access     Report	Ш	Preferences           Show notifications about newly created "allow" rules           Image: Show notifications about newly created "block" rules           Internet Connection Sharing mode           Image: Use fast checksums (faster but slightly less secure)
K Exchange Shield	Ŧ	

On the Firewall settings page, you can adjust the firewall security settings to limit external connections according to the environment in which the computer is being used.

- Home/low risk zone suitable when using your computer as part of a home/private network. If this setting is selected, the firewall will allow all communication with the network.
- Work/medium risk zone suitable for when your computer is connected to a wider public network, including direct connections to the internet. This is the default setting and if selected, the firewall will allow communication in and out only if allowed by the "Application Rules". If no rule has been created, you will be asked to confirm whether or not communication with a particular application should be allowed.
- Public/high risk zone suitable when using your computer to connect to a public network and where you want to ensure the maximum level of security. This is the most secure setting and if selected, no incoming communication will be allowed, effectively making your computer completely invisible to others.

### Computer catalog

#### **Firewall Shield**

Firewall Shield     Policies	*	Policies
Network profiles Packet rules Application rules		The controls on this page enable you to set the parameters of the firewall.
Antispam Shield		
Main		Auto-decide   Home/Low Risk Zone
Main (optional)		Auto-decide   Work/Medium Risk Zone
Whitelist		
Blacklist		Auto-decide   Public/High Risk Zone
Sandbox Sandbox		
Storage		Preferences
Web browsers		Show notifications about newly created "allow" rules
Virtualized processes		Show notifications about newly created "block" rules
Exclusions	Ε	Internet Connection Sharing mode
Internet access		
Report		Use fast checksums (faster but slightly less secure)
Exchance Shield	*	

- Internet Connection Sharing (ICS) mode
  - check only if computer acts as gateway between the Internet and other computers
  - Use fast checksums checksums (or hashes)
    - are used to identify the applications defined on the Application Rules page.
    - If the calculated checksum does not match the checksum that is stored for an application, it will be treated as a new application.

### Computer catalog

#### **Firewall Shield**

Firewall Shield Policies	^	Network profiles	•	
Network profiles Packet rules		Please review the settings related		-
Application rules		Table automatic and the suit		twork Profiles
Antispam Shield		Enable automatic profile swi	tening	
Main Maia (anti-anti-		Name	MAC address	Profile
Main (optional) Whitelist				
Blacklist				
Sandbox				
Sandbox				
Storage				
Web browsers				
Virtualized processes	Ξ			•
Exclusions				
Internet access			<u>A</u> dd	Remove
Report	-			
Exchange Shield				

- Profile will be changed automatically when a new network is detected, if the new network corresponds with one of the networks in the table.
- If a profile has been specified for a particular network, the network and its corresponding profile will be listed on this page.
- When a new network is detected, you will be asked to specify the new network profile.

### Computer catalog

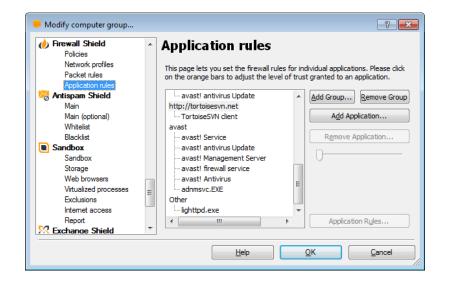
#### **Firewall Shield**

Firewall Shield Policies	^	Packet rules					
Network profiles Packet rules Application rules		E. Name Windows Netw	Action Allow	Proto TCP/	Direc Out	Send To	Â
Antispam Shield Main Main (optional) Whitelist Blacklist		Windows Netw  Vindows Netw  DNS  DNS  LCP  Comp Ping Echo  Comp Traceroute	Allow Allow Allow Allow Allow	TCP/ TCP/ All ICMP	In Out In/Out Out In		ш
Sandbox Sandbox Storage Web browsers Virtualized processes		<ul> <li>Icmp TraceGute</li> <li>Icmp TimeExce</li> <li>Icmp DestUnre</li> <li>Icmp SourceQu</li> <li>GRE</li> </ul>	Allow Allow Allow Allow	ICMP ICMP ICMP GRE	In/Out In/Out In/Out		
Exclusions Internet access Report X Exchance Shield	•	✓         MS VPN - PPTP           ✓            ✓	Allow	TCP (6)	Out Add	. <u>R</u> emove	•

• Expert users can also review the list of low-level (packet) rules of the firewall.

### Computer catalog

#### **Firewall Shield**



- Default rules are created automatically for software applications from trusted sources when they are started for the first time.
- For detailed information see the following article on the avast! web site:

https://support.avast.com/index.php? m=know ledgebase& a=viewarticle&kbarticleid=482

# **ANTISPAM SHIELD**

### Computer catalog

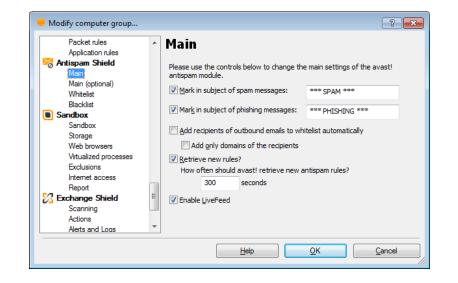
#### Antispam Shield

Application adap	*	Antispam Shield
Application rules Antispam Shield Main Main (optional) Whitelist		The avast! antispam module is used to filter out junk e-mail.
Blacklist		
Sandbox		
Sandbox		
Storage		
Web browsers		
Virtualized process	es	
Exclusions		
Internet access		
Report		
🔀 Exchange Shield	=	
Scanning		
Actions		
Alerts and Loos	*	
		Help OK Cancel

 Comprehensive spam and phishing filter, which works as a plug-in to MS Outlook and a generic POP3/IMAP4 proxy for other email clients.

### Computer catalog

#### Antispam Shield



- You can add a mark in the subject of spam and phishing messages.
- You can also add recipients of outgoing emails, or the recipient's domain name, to the whitelist of trusted addresses.

#### • Retrieve new rules?

- Here you can specify how often avast! checks for updates to the rules that are used to identify potential spam.
- Default timer set to 5 minutes.

#### Enable LiveFeed

- All incoming emails are checked against an online database of global spam messages before carrying out the heuristic and other checks.
- The majority of spam messages are detected this way, so it is recommended to leave this box checked.

### Computer catalog

#### Antispam Shield



• Use the controls on this page to separately configure the protection for Server products and Consumer (client) products.

### Computer catalog

#### Antispam Shield



- By clicking on the box provided, you can enter the email addresses of senders from whom email will not be treated as spam and will always be delivered as normal. You can enter the specific email address, e.g. jim.frost@gmail.com , or if you enter the domain name only (e.g. domain.com), all emails from that domain will then be allowed.
- To remove an email address from the whitelist, click on it once and then click "Remove".

### Computer catalog

#### Antispam Shield

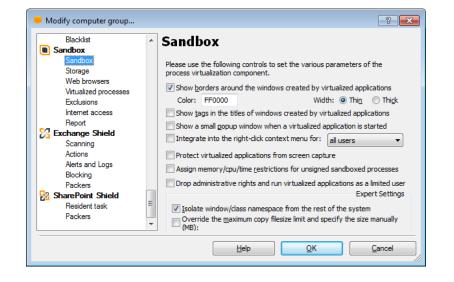
Packet rules Application rules	*	Blacklist
Antispam Shield Main Main (optional) Whitelist		Please define which emails will always be considered to be spam. Use either full email-addresses (such as john.smith@domain.com) or domain names (e.g. domain.com).
Blacklist Sandbox		
Sandbox		
Storage		
Web browsers		
Virtualized processes		
Exclusions		
Internet access		
Report		
🔀 Exchange Shield	=	
Scanning		
Actions		<u>A</u> dd <u>R</u> emove
Alerts and Loos		

- By clicking on the box provided, you can enter the email addresses of senders from whom email will always be treated as spam. You can enter the specific email address, e.g. jim.frost@gmail.com , or if you enter the domain name only (e.g. domain.com), all emails from that domain will be treated as spam.
- To remove an email address from the blacklist, click on it once and then click "Remove".

## SANDBOX

### Computer catalog

#### Sandbox



• Here you can set the various parameters of the Sandbox.

### Computer catalog

#### Sandbox

Blacklist	*	Storage
Sandbox Storage Web browsers		The settings on this page allow you to specify the location of your sandbox storage.
Virtualized processes		
Exclusions		The same drive as the modified file
Internet access		Driver
Report		○ <u>D</u> rive:
🔀 Exchange Shield		Path: Browse
Scanning		Paul:
Actions		
Alerts and Logs		
Blocking		
Packers		
3 SharePoint Shield		
Resident task	Ξ	
Packers		
	Ŧ	

# • Store files in special storage in the sandbox (contents will not be automatically deleted)

 Normally, whenever an application is launched in the sandbox, avast! creates a special sandbox storage area for that application and where virtualized files/folders are saved.

#### • Sandbox storage

 Hidden folder on the root of drive C:\## aswSnx private storage

This sandbox storage is then normally deleted when the application is terminated. If the box "Store files in special storage in the sandbox..." is checked, a completely separate sandbox storage will be used for web browsers and this will not be automatically deleted when the browser is terminated. This means that the next time the browser is launched, it will use the same sandbox storage from the previous browser session, which will therefore improve the browser's performance.

### Computer catalog

#### Sandbox

Blacklist		Web browsers
Sandbox		
Sandbox Storage		The settings below help to improve the web browser's performance in sandbox.
Web browsers Virtualized processes		Save trusted downloaded files outside the sandbox
Exclusions		Exclusions
Internet access		All settings (incl. extensions, add-ons, etc.)
Report		Bookmarks
S Exchange Shield		History
Scanning Actions		Cookies
Alerts and Logs		Maintenance
Blocking Packers		Cache web browser's files (sandbox will not be automatically deleted)
3 SharePoint Shield	=	Automatically cleanup sandbox
Resident task	Ξ	Once every 0 days
Packers		
	*	○ Once every Sunday ▼
		Help OK Cancel

- These settings can help to improve the web browser's performance in the sandbox.
  - Under "Exclusions", you can specify that some options should not be virtualized when running your web browser in the sandbox e.g. bookmarks, browsing history, and cookies
  - these options will not be virtualized and will be available to any other browsing sessions which are open or which are opened later, whether inside the sandbox or outside.

### Computer catalog

#### Sandbox

Blacklist Sandbox Sandbox Storage	*	Virtualized processes Here you can modify the list of applications that will be automatically virtualized.
Web browsers Virtualized processes Exclusions Internet access Report Exchange Shield Scanning		Processes Add Remove
Actions Alerts and Logs Blocking Packers SharePoint Shield Resident task Packers	ш	Virtualized Folders Add Remove

- List of specific files or/and applications, that will be automatically virtualized.
- Browse to locate and select a file or path that should always be run inside the sandbox.
- To remove a file or path from the sandbox, just click the Remove button.

### Computer catalog

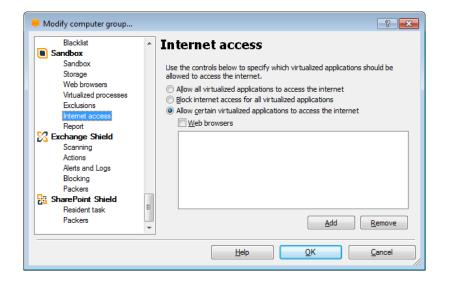
#### Sandbox

Blacklist		Exclusions
Sandbox		
Sandbox		Here you can modify the list of locations that will not be virtualized.
Storage		
Web browsers		
Virtualized processes		
Exclusions		
Internet access		
Report		
S Exchange Shield		
Scanning		
Actions		
Alerts and Logs		
Blocking		
Packers		
SharePoint Shield		
Resident task	Ε	
Packers		Add Remove
	-	Tag Trunke
		Help OK Cancel

 On this page you can specify files that should never be run virtualized. Just click on the browse button and then locate and select the file or path that should be excluded. To remove a file or path from the list of exclusions, just click the Remove button.

### Computer catalog

#### Sandbox



- Here you can define which (or if any) virtualized applications are allowed to access the Internet.
  - It is possible to "Allow all" or to "Block all" or you can specify certain applications that will be allowed Internet access and all others will be automatically blocked. For example, you can allow access for all web browsers or you can define other specific applications by clicking in the box "Select additional applications" and using the browse button to locate and select applications that should be allowed Internet access.

### Computer catalog

#### Sandbox

Blacklist Sandbox	^	Report
Sandbox Storage Web browsers		Use the controls below to generate a report file of the virtualized application, and to specify the content of the report.
Virtualized processes		Report file
Exclusions		None Sort by Ocategory
Internet access		Plain text (ANSI)
Report		Plain text (Unicode)
🄀 Exchange Shield		
Scanning		© <u>X</u> ML
Actions		Delete logs older than 0 days
Alerts and Logs		
Blocking Packers		Reported activities
SharePoint Shield		Eile-system
Resident task	Ξ	Dropped files
Packers		Registry Network
	Ŧ	

- On this screen you can specify that a report should be created after an application is run in virtualization mode. You can specify the type of report file (plain text or xml) and the period for which the report should be retained.
- The report will contain basic information about the application that was run in virtualized mode, the date and time the application was run in virtualized mode and details of what actions were carried out while the program was running in virtualization mode.

## **EXCHANGE SHIELD**

### Computer catalog

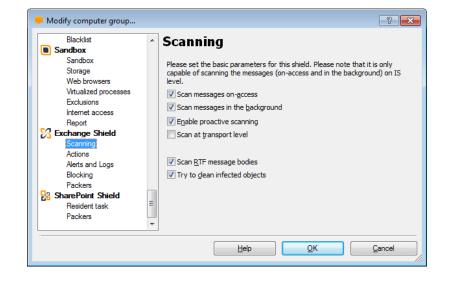
#### **Exchange Shield**

Blacklist		Exchange Shield
Sandbox Sandbox Storage Web browsers Virtualized processes Exclusions Internet access Repot Exchange Shield Scanning Actions Alerts and Logs Blocking Packers Packers		The Exchange Shield monitors all your e-mail traffic and scans all messages even before they reach your computer and have the chance to do any harm.
SharePoint Shield Resident task Packers	=	

- The Exchange Shield monitors all your e-mail traffic and scans all messages even before they reach your computer and have the chance to do any harm.
- It provides vital protection for your mailbox servers and ensures your data remains shielded from detrimental loss.

### Computer catalog

#### **Exchange Shield**



Here you can set the basic scanning parameters.

### Computer catalog

### **Exchange Shield**

Blacklist	*	Actions
Sandbox Sandbox Storage Web browsers Virtualized processes Exclusions Intermet access Report Exchange Shield Scanning Actions		Please select what policy you would like to use when an infected or untestable item is found in a message.  for untestable items for infected items a Allow full access to the item a Qverwrite the item with a warning belete the whole message If possible, change the object icon
Alerts and Logs Blocking Packers SharePoint Shield Resident task Packers	III	
	Ŧ	Help OK Cancel

Here you can specify what action should be taken when an infected or untestable object is discovered.

### Computer catalog

#### **Exchange Shield**

Blacklist	*	Alerts and Logs
Sandbox Storage Web browsers Virtualized processes		By selecting one of the following categories, you can set how much information will be logged. The log messages will be written to the standard NT Event Log.
Fxclusions		Logging level
Internet access		Normal (warnings, errors & viruses only)
Report		Low (errors & viruses only)
🔀 Exchange Shield		Normal (warnings, errors & viruses only) High
Scanning		Maximum
Actions Alerts and Logs Blocking		
Packers		
SharePoint Shield		
Resident task	=	
Packers	-	
		Help OK Cancel

You can also specify what information will be saved to the log files e.g. only errors and viruses, or other additional less critical information as well.

### Computer catalog

### **Exchange Shield**

Blacklist		Blocking	
Sandbox		<b>j</b>	
Sandbox Storage			be set up on this page. Please note that these
Web browsers		settings are common for	all tasks (not task specific).
1100 010110010		Enable attachment bl	ocking by name
Virtualized processes Exclusions		Block attachment with	the following filename masks:
Internet access			
Report			
S Exchange Shield			
Scanning			
Actions			
Alerts and Logs			
Blocking			
Packers			<u>A</u> dd <u>R</u> emove
3 SharePoint Shield	=	Filename replacement:	Blocked_by_avast.txt
Resident task	=		
Packers		Replace with:	avast! blocked the content. For more information,
	Ŧ		

And you can also block attachments with specific filename masks.

### Computer catalog

### **Exchange Shield**

Blacklist	*	Packers
Sandbox Storage Web browsers		Please select which archive (packer) files avast! should attempt to unpack during the scanning process. Packers
Virtualized processes Exclusions		✓ <u>A</u> ll Packers
Internet access Report		Self-extracting DOS executables
Scanning		Droppers
Actions		ZIP archive ACE archive
Alerts and Logs Blocking Packers		ARC archive
SharePoint Shield	E	Packer description
Resident task Packers	=	

Finally, you can also select which types of archive files avast should attempt to unpack for scanning.

# **SHAREPOINT SHIELD**

### Computer catalog

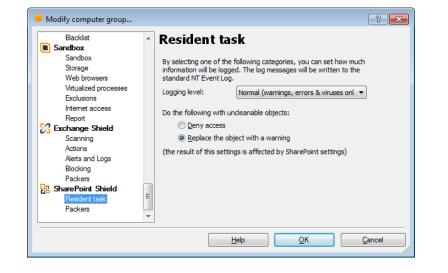
#### SharePoint Shield

Blacklist	*	SharePoint Shield
Sandbox Storage Web browsers Virtualized processes Exclusions Internet access		The SharePoint Shield monitors all your file traffic and scans all files even before they reach your computer and have the chance to do any harm. Enable SharePoint Shield Monitor
Report Sinchange Shield		
Scanning		
Actions		
Alerts and Logs		
Blocking		
Packers	_	
SharePoint Shield	=	
Resident task	-	
Packers	-	
		Help OK Cancel

 Our SharePoint Server plug-in integrates with SharePoint 2003/2007/2010 Servers via Microsoft's own AV interfaces. It prevents users from uploading or downloading malicious content to SharePoint libraries.

### Computer catalog

#### SharePoint Shield



- You can specify what information will be saved to the log files e.g. only errors and viruses, or other additional less critical information as well.
- You can also specify what action should be taken with objects that cannotn be cleaned.

#### Computer catalog

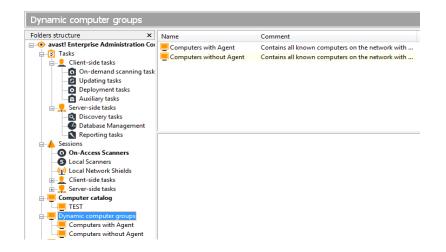
#### SharePoint Shield

Blacklist Sandbox	^	Packers
Sandbox Storage Web browsers		Please select which archive (packer) files avast! should attempt to unpack during the scanning process.
Vitualized processes Exclusions Internet access Report Exchange Shield Scanning Actions Alerts and Logs Blocking		All Packers      Self-extracting DOS executables     Self-extracting Win32 executables     Droppers     ZIP archive     ACE archive     ARC archive     AR archive     AR archive
Packers SharePoint Shield Resident task Packers	∎ F	Packer description
		Help OK Cancel

Finally, you can also select which types of archive files avast should attempt to unpack for scanning.

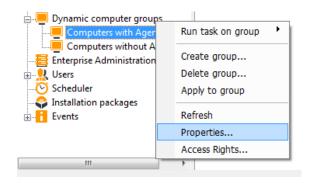
# **DYNAMIC COMPUTER GROUPS**

#### Dynamic computer groups



- Dynamic computer groups provide a powerful method to search, manage, and further categorize the Computer Catalog. You can think of it as a highperformance filter for the Computer Catalog, but it's much more than just a filter.
- It can be used anywhere a computer group can be used.

#### Dynamic computer groups



	Group name
omputers with Agent	
	Comment
ontains all known computers on the network	with at least one managed product
	Query definition
xpression	Create expression
AND Agent version != '0.0.0.0'	Group by AND
-	Group by <u>O</u> R
	Edit
	Earch

- Each dynamic group is made up of a set of expressions connected by logical operators like AND or OR, for example, "computer\_name = NEMESIS."
- Expressions include operators like equal-to, smaller-than, greater-than, and they can also contain functions, such as MIN, MAX, or AVERAGE. Individual expressions can also be nested together, i.e., they support grouping by parentheses.

ריי 	Query Expression
	VPS version
	Notes: * and ? wildcards are accepted. Strings must be enclosed in apostrophes. != stands for "not equal". MIN, MAX and AVG functions don't need a parameter. Date is in the MM/DD/YYYY format. Logical values are 0 and 1.
	OK <u>C</u> ancel

#### Dynamic computer groups

VPS version	Ŧ	=	•			•	0		
Computer name		_							
Group Name									strophes
Domain								d a pa	arameter.
VPS version		forma	t. Log	ical valu	ies are 0	) and	1.		
VPS timestamp					_			_	
Last communication						OK			Cancel
Last virus					_				
Agent version Last IP address									
Installation GUID									
avast! Endpoint Protect									
avast! Endpoint Protect									
avast! Endpoint Protect									
avast! Endpoint Protect									
Mirror installed	Ξ								
Machine needs reboot									
Temp dir space									
Drives									
Time zone CPU name									
Number of CPUs									
Size of RAM									
OS name									
OS build									
OS major version									
OS minor version									
OS platform		1							
OS CSD									
Installed shields	-								
Running shields Shields waiting to start '		9							

The following parameters are supported for building the expression:

#### Computer name (type: string)

- The name of the computer as stored in the Catalog.
- Group name (type: string)
  - The name of the (static) group in which the computer is stored in the Catalog.
- Domain (type: string)
  - The name of the Windows domain or workgroup in which the computer resides.
- VPS version (type: tri-dot string)
  - The version number (in the form x.x.x.x) of the current VPS file (virus database) installed on the machine.
- VPS timestamp (type: string)
  - The date of release of the current VPS file (virus database) installed on the machine.
- Last communication (type: string)
  - The date and time of last contact with the machine.
- Last virus (type: string)
  - The name of the last virus found on the machine.
- Agent version (type: tri-dot string)
  - The version of the avast! client installed on the machine (in the form x.x.x., e.g., 4.1.102.0).
- Last IP address (type: tri-dot string)
  - The last IP address (in the form x.x.x.x) that the machine used to contact the server.
- Installation GUID (type: string)
  - The GUID (globally-unique-identifier) of the client installed on the machine.

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#### Dynamic computer groups

VPS version		•	▼ 0	
Computer name Group Name Domain VPS version VPS timestamp	e accept (IN, MA)	K and AVG fu	nust be enclosed i inctions don't neer is are 0 and 1.	d a parameter
Last communication Last virus			<u>0</u> K	<u>C</u> ancel
Agent version				
Last IP address Installation GUID avast! Endpoint Proteci avast! Endpoint Proteci				
avast! Endpoint Protec avast! Endpoint Protec Mirror installed	= -			
Machine needs reboot Temp dir space Drives				
Time zone CPU name Number of CPUs Size of RAM	1			
OS name OS build OS major version				
OS minor version OS platform OS CSD	-			
Installed shields Running shields	-			

#### avast! Endpoint Protection installed (type: logical value, i.e. 0 or 1)

- A logical value specifying whether avast! NetClient Edition is installed on the machine.
- avast! Endpoint Protection Plus installed (type: logical value, i.e. 0 or 1)
  - A logical value specifying whether avast! NetClient Edition is installed on the machine.
- avast! Endpoint Protection Suite installed (type: logical value, i.e. 0 or 1)
  - A logical value specifying whether avast! NetClient Edition is installed on the machine.
- avast! Endpoint Protection Suite Plus installed (type: logical value, i.e. 0 or 1)
  - A logical value specifying whether avast! NetClient Edition is installed on the machine.
  - avast! NetServer installed (type: logical value, i.e. 0 or 1)
    - A logical value specifying whether avast! NetServer Edition is installed on the machine.
- Mirror installed (type: logical value, i.e. 0 or 1)
  - A logical value specifying whether the managed product "2nd level mirror" is installed on the machine.
- Machine needs reboot (type: logical value, i.e. 0 or 1)
  - A logical value specifying whether the agent on the machine is waiting for a reboot (e.g. because of an incomplete update attempt).
- Temp dir space (type: integer)
  - Total free space in the machine's TEMP directory, in megabytes.
- Drives (type: string)
  - The list of logical drives on the machine, separated by semicolons without spaces (as A;C;D).
- Time zone (type: integer)
  - The time zone of the machine (signed number of minutes shifted from GMT).
- CPU name (type: string)
  - The name of the CPU installed on the machine, as presented by the system.
- Number of CPUs (type: integer)
  - The number of processors installed on the machine.
- Size of RAM (type: integer)
  - The size of operating memory installed on the machine, in megabytes.

### Dynamic computer groups

#### OS name (type: string)

The name of the machine's operating system, such as "Windows XP."

#### OS major version (type: integer)

 The major version number of the machine's operating system. For example, the retail version of Windows XP has this value set to 5.

#### OS minor version (type: integer)

- The minor version number of the machine's operating system. For example, the retail version of Windows XP has this value set to 1.

#### OS build (type: integer)

 The build number of the machine's operating system. For example, the retail version of Windows XP has this value set to 2600.

#### OS platform (type: integer)

 The platform ID of the machine's operating system. Value 1 means Windows 9x/ME, value 2 means NT-based platforms.

#### OS CSD (type: string)

 The machine operating system's service pack name, for example, "Service Pack 3."

#### Installed shields (type: string)

 The list of avast! Real time shields (modules) installed on the machine. Shields are listed by their short names.

#### Running shields (type: string)

 The list of avast! Real time shields (modules) running on the machine. By definition, this is a subset of the value "Installed shield."

#### Waiting shields (type: string)

 The list of avast! Real time shields (modules) that have the current status "waiting to start" on the machine. By definition, this is a subset of the value "Installed shield"

#### Dynamic computer groups

Query Expression	×
VPS version	= • •
Notes: * and ? wildcards are != stands for "not equal". M Date is in the MM/DD/YYYY fi	<ul> <li>Strings must be enclosed in apostrophes.</li> <li>nd AVG functions don't need a parameter.</li> <li>gical values are 0 and 1.</li> </ul>
1	>= = <u></u>

- The following operators are supported:
  - Equal-to, =.
  - Not-equal-to, !=.
  - Smaller-than, <.</li>
  - Greater-than, >.
  - Smaller-than-or-equal-to, <=.</li>
  - Greater-than-or-equal-to, >=.

#### Dynamic computer groups

Query Expression		×
VPS version	<b>•</b>	0
Notes: * and ? wildcards are accepted. != stands for "not equal". MIN, MAX an Date is in the MM/DD/YYYY format. Logi	MAX	nclosed in apostrophes. on't need a parameter. nd 1.
	HOURSAGO MINUTESAGO	<u>C</u> ancel

The following functions are supported:

#### MIN

 This function returns the computer(s) with the minimum value of the parameter. It has no operands.

#### MAX

 This function returns the computer(s) with the maximum value of the parameter. It has no operands.

#### AVG

 This function returns the computer(s) with the average value of the parameter. It has no operands.

#### DAYSAGO

 This function returns the computer(s) for which the parameter, which must be of the timedate type, occurred N days ago at most. The operand specifies the value of N.

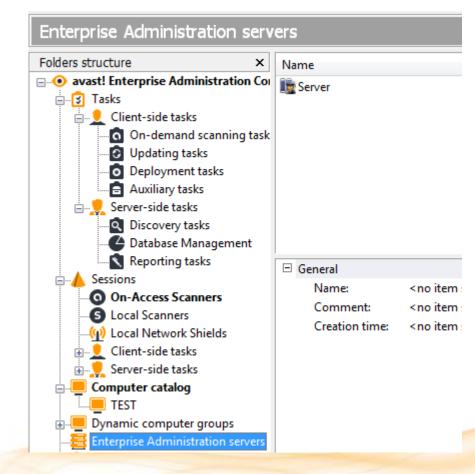
#### HOURSAGO

 This function returns the computer(s) for which the parameter, which must be of the timedate type, occurred N hours ago at most. The operand specifies the value of N.

#### MINUTESAGO

- This function returns the computer(s) for which the parameter, which must be of the timedate type, occurred N minutes ago at most. The operand specifies the value of N.
- There are only two logical operators for connecting multiple expressions: **OR and AND.** The dynamic group definition can be made up of any number of expressions connected by either of these logical operators.

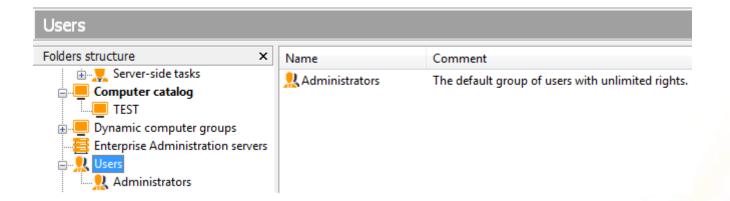
# ENTERPRISE ADMINISTRATION SERVERS



- This is where information about all Enterprise Administration servers is stored.
- By default, there's only one the one you're connected to. But for larger networks, it may be necessary to have several EAS's deployed on the network.

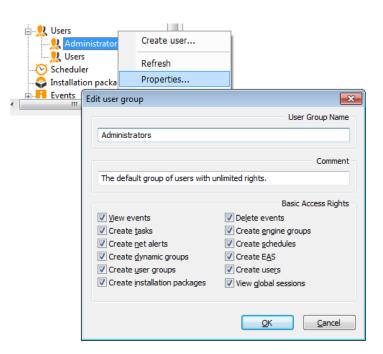


#### Users



- The AEA has a very flexible system for defining users and user rights.
- The Users folder holds the list of all users (administrators\users) who are permitted to access the management capabilities of the EAS, such as:
  - View events
  - Create tasks
  - Create dynamic groups
  - Create EAS
  - etc..

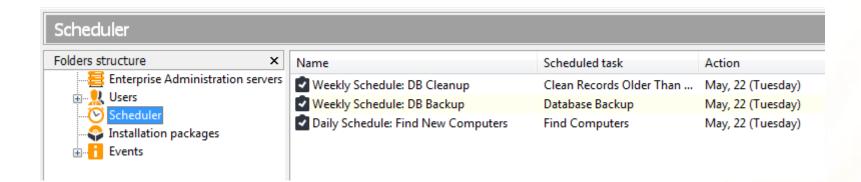




- Different users have different access rights.
- The users can be bunched together in user groups, which are displayed as subfolders of the Users folder.
- Every user has to be in a group, i.e., it is not possible to create individual users in the root of the Users folder.
- The group properties define its basic rights

### **SCHEDULER**

#### Scheduler



- The scheduler folder holds the scheduler event objects that define when the tasks will run and other important parameters.
- This is one way to edit the schedule. Another is to define the scheduling rules in the task's properties.

### Scheduler

Sche	dule Proper	ties		×
			S	cheduler event
<u>N</u> a	ame:	Unnamed		
De	escription:			
<u> </u>				
	Dis <u>a</u> bled	rt the task if r	unning on batter	ies
			tery mode begin	
				Scheduled task
s	Scan Local Di	sks		-
6	_		EAS to sched	ule the task on
6	Server			•
				Scheduled time
	Sch	eduling type:	once	•
		Launch time:	15 : 7	
	Launch da	te: 5	June	• 2012
		Time is	in military (0:00	-23:59) format.
			ОК	<u>C</u> ancel

Here you should enter the parameters defining the new task

- Name
  - Name of the task, e.g. "Weekend scan".
  - Description
    - Enter a brief description of the task e.g. "Scans all the hard disks every Sunday night".
- Disabled

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- This option disables the scheduled task. It is useful when you need to stop the task from running, but you do not want to delete the task completely and have to re-enter it again later.
- Do not start the task if running on batteries
  - Useful mainly for notebook owners. The task will not be started if the computer is running on batteries.
- Terminate the task if battery mode begins
  - If, while a scheduled task is running, the computer is cut off from the electric power supply and switches to batteries, the task will be terminated. Again, this is useful mainly for notebook owners.
- Scheduled task
  - Select the task to be scheduled.
- Scheduling type
  - Here you can specify when the task will be started.
    - Once you simply enter the time and date when the task should be run.
    - Daily enter the time only the task will be started each day at the given time.
    - Weekly (or monthly)

#### Launch time/launch date

- Here you can set the time and the actual day of the week (month) when the scheduled task should be run.

### **INSTALLATION PACKAGES**

### Installation packages

Installation packages						
Folders structure ×	Name	Comment				
Scheduler		Create package				
i - <mark>i</mark> Events		Refresn Properties				
Insta	Illation Packag		×			
ī	Jnnamed	Package	e name			
	Comment					
a	vast! Endpoint R vast! Mirror ript (Admin.ini) ·	e-prepared				
		Load <u>A</u> dmin.	ini			
			ncel			

Because the Deployment tasks run silently (without any user intervention), they need to have all the installation options properly preset.

 The installation options are used to define the settings that will be used by the Deployment tasks to push the installations to the clients. Options include: what product to install, destination folder, service accounts, etc.

The **Installation Package** must therefore be created before the deployment task!

### Installation packages

Installation Package	<b>—</b>
	Package name
Unnamed	
	Comment
	Package components
	▼ <u>E</u> dit
avast! Endpoint Protection avast! Mirror script (Admin.ini) yourself.	e-prepared install
Scipt (Raining) Joar Scin	
	Load <u>A</u> dmin.ini
Ōĸ	Cancel

 To prepare the installation package, first go to the "Installation packages" folder and select the "Create Package..." option. Select the type of package to be prepared:

#### avast! Endpoint protection

 is a managed version of avast! antivirus

#### • Mirror

 is a second-level mirror agent that can be used to load-balance the updating.

### Installation packages

Installation Package	<b>—</b>
	Package name
Unnamed	
	Comment
	Package components
The state of the s	<u>E</u> dit
avast! Endpoint Protection avast! Mirror script (Admin.ini) yourself.	re-prepared install
scipt (Administry yourset)	
[	Load <u>A</u> dmin.ini
<u></u> K	Cancel

- Before creating the installation package, you can load the Admin.ini files which contain the pre-defined install settings/scripts.
- This option, intended especially for network administrators, makes it possible (and easy) to install avast! on an arbitrary number of computers. The files may contain predefined settings for both the program and the various tasks.

- Admin.ini
  - contains the avast! program settings

### Installation packages

Installation Packag	•	
	Package name	
Unnamed		
	Comment	
	Package components	
avast! Endpoint F		
Alternatively, you script (Admin.ini)	Installation Package Properties	<b>—</b>
Scipt (richard in 1)		EAS Server
		▼ <u>D</u> etect
		Installation Components
	Browser protection	
	Mail Shield	
	P2P Shield	
		=
	File System Shield	
	Antispam Shield	
	Behavior Shield	
	Firewall Shield	
	Server Shields	
	SharePoint Shield (32bit)	<b>_</b>
	Schedule <u>b</u> oot-time scan	<u>O</u> K Cancel

- Then click the "Edit..." button to set the Installation Components.
- Detect:
- automatically detect available EAS on the network. If the auto detection does not work, you can enter the DNS/IP address of your EAS manually.
- When the installation package is ready, create the deployment task.



#### **Events**

Events							
Folders structure	×	Occurred	Event id	Object	Description		
Events	*	🗥 May, 22 (Tuesday)	2181048199	Server	Subscription for pr		
		🔥 May, 22 (Tuesday)	2181048199	Server	Subscription for pr		
Client-side events		() May, 22 (Tuesday)	1107306309	Administrator	User successfully le		
Custom events filter		🗘 May, 22 (Tuesday)	1107306341	Administrator	New task has been		
		🗘 May, 22 (Tuesday)	1107306341	Administrator	New task has been		
		🗘 May, 22 (Tuesday)	1107306341	Administrator	New task has been		
		( May, 22 (Tuesday)	1107306341	Administrator	New task has been		
		🗘 May, 22 (Tuesday)	1107306341	Administrator	New task has been		
		The most is	44.0700.0014	A A CONTRACTOR	ALC: 1 1 1		

- This is the AEA event log. A lot of important information is written to the log from the EAS and from the client computers. The logs are very easy to navigate and include powerful filtering capabilities.
- To ensure the overall health of the network, it is necessary to continuously monitor the log entries that are sent from the clients or written by the EAS itself. In most cases, this is done via the Events folder in the console.

#### **Events**

Events						
Folders structure	×	Occurred	Event id	Object	Description	
Events	*	🗥 May, 22 (Tuesday)	2181048199	Server	Subscription for p	
Server-side events		🔥 May, 22 (Tuesday)	2181048199	Server	Subscription for p	
Client-side events		() May, 22 (Tuesday)	1107306309	Administrator	User successfully	
Y Custom events filter		🚯 May, 22 (Tuesday)	1107306341	Administrator	New task has been	
		🚯 May, 22 (Tuesday)	1107306341	Administrator	New task has been	
		🖏 May, 22 (Tuesday)	1107306341	Administrator	New task has been	
		🗘 May, 22 (Tuesday)	1107306341	Administrator	New task has been	
		🗘 May, 22 (Tuesday)	1107306341	Administrator	New task has bee	
		All and it	4407000044			

• Clicking the events folder displays all events stored in the database, unfiltered. There are also three subfolders:

#### Client events

 This folder contains all events sent by the managed clients. It contains warnings/critical error entries, so it's good to monitor this folder on a regular basis.

#### Server events

This folder gathers events generated by the EAS (with the exception of task-specific events, which are filtered out from this view). This includes a simple audit — entries documenting when the server was started/stopped, when a new object was created, etc.

#### **Events**

Events							
Folders structure	×	Occurred	Event id	Object	Description		
Events	*	🗥 May, 22 (Tuesday)	2181048199	Server	Subscription for pr		
		🔥 May, 22 (Tuesday)	2181048199	Server	Subscription for pr		
Client-side events		🚯 May, 22 (Tuesday)	1107306309	Administrator	User successfully le		
		🚯 May, 22 (Tuesday)	1107306341	Administrator	New task has been		
		🚯 May, 22 (Tuesday)	1107306341	Administrator	New task has been		
	May, 22 (Tues	🚯 May, 22 (Tuesday)	1107306341	Administrator	New task has been		
		() May, 22 (Tuesday)	1107306341	Administrator	New task has been		
		( May, 22 (Tuesday)	1107306341	Administrator	New task has been		
		Au ma is	44.0700.0044				

#### • Custom events filter

- This folder lets you define your own custom mask to exactly specify the events you'd like to see. Filtering options include: by substring, by type, by category, and by time.
- The event entries cannot be directly deleted from the log. Old entries can be removed using a Database Maintenance task (using the option Delete Events Older Than ... Days).



Monitoring the EAS Logs

- Besides the events written directly to the database—shown in client-side and server-side logs, which can be viewed in the Events folder in the administration console—the EAS also logs certain events in separate log files. These logs are usually used for troubleshooting purposes. They're not written to the database because the database connection may not be available. For example, it's impossible to log database connection problems to the database.
- Most of the logs are stored in the ..Program Files\AVAST Software\Enterprise Administration\DATA\log folder. You can use Notepad or any text program to view them.

🧿 ava	st! Er	nterprise Administratio	n Console, M	lay2012	2					
File	Vie	w Help								
🖨 Se	~	Program Folders								
F	~	Status Bar		dm	inistration Co	nsol				
		Show EAS Logs			Server					
а		Show EAS Mirror St	atus	-	Remote Install	_				
Ent Admii Co	nin		Select All Invert Selection	Ctrl + A Ctrl + I	-	Setup/Update	-ilc mi			
		Copy to Clipboard	Ctrl + C	asks	Mirror	This				
Tasks			Deploym	tasks	sks	This all a sma				

- The logs can also be viewed directly from the console, by using the menu item View / Show EAS Logs. The console opens the log files in your web browser, so you can even bookmark them if you wish. Of course, the console view only works if you can connect to the EAS, that is, if the EAS service is running properly—not always the case if there's a problem.
- Mirror logs are stored in the folder ..Program Files\AVAST Software\Enterprise Administration\mirror\logs
- AEA installer logs are written to ..Program Files\AVAST Software\Enterprise Administration\Setup.



billy LAS VEGAS

alexandro

# avast! Enterprise Administration

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www.avast.com

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