

# Columbus UpdateManagement

User Manual

Product version 7.6

# columbus

Issue: 12.18

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## CHAPTER 1

# Product Description

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## 0.1 Introduction

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Columbus UpdateManagement detects missing updates for software products and installs them in a transparent and reliable manner. The updates are deduplicated as data blocks and are stored in a block store. The clients receive the required updates as individual data blocks instead of complete files. This saves memory capacity on the server and transmission volume for the client.

## 0.2 Supported products

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### 0.2.1 Microsoft operating systems

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Microsoft Windows XP (SP3), Server 2003 (SP2)\*,\*\*

Microsoft Windows Vista, Server 2008\*\*

Microsoft Windows 7, Server 2008 R2 or higher

- \* Requires an update of the Windows Update Agents (WUA) which can be obtained directly from Microsoft. The job «PrepareWUA» is supplied with the Columbus OS deployment.
- \*\* The operation of UpdateManagement on these operating systems is assured as «best effort», individual functions (e.g. de-installation) cannot or only partially be guaranteed.

### 0.2.2 Microsoft applications

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All Microsoft products included in the official update catalog of Microsoft.

### 0.2.3 Third-party applications

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The catalog for third-party products is continuously enhanced by brainwaregroup.

## 0.3 Infrastructure components

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### 0.3.1 Block Store Agent

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The Block Store splits files into blocks and stores them deduplicated. Block stores can be mutually synchronized so that Columbus Management Client can obtain the required blocks from different block stores according to their geographical location.

### 0.3.2 Endpoint Protection Agent

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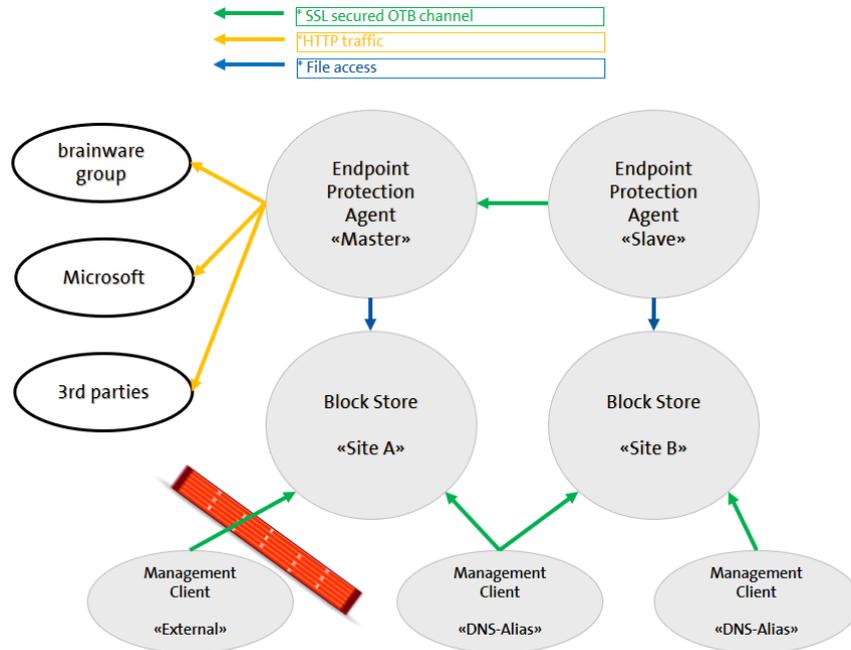
In a Columbus organization, several Endpoint Protection Agents can share tasks and functions:

Task / Function	Master	Slave
Updates management	x	
Groups management	x	
Catalog downloads	x	
Updates download	x	
Consistency check of Block Store	x	x
Synchronization source for other Block Stores	x	x
Synchronization from other Block Stores		x

**Important** Only one Endpoint Protection Agent can bear the Master role within a Columbus organization.

## 0.4 Communication

The Columbus components communicate with each other over a SSL-protected tunnel and use the "Columbus Shareless" technology for data transfer, which saves memory capacity and network bandwidth.



## 0.5 Process

The Endpoint Protection Agent (contains UpdateManagement) downloads the catalogs for update detection and makes them available to the clients in the Block Store.

Columbus Management Client receives the catalogs from its assigned Block Store and executes a scan if the time frame allows for it (see «Client configuration»). The results are reported back to the Columbus infrastructure.

The Columbus Management Client downloads the updates that have been released for installation (see «Updates management») from his assigned Block Store.

Depending on the configuration made by the administrator, the users are involved in the decision regarding the moment of installation before updates are installed. After installing the updates, the Columbus Management Client executes again a scan and reports the results back to the Columbus infrastructure.

### Note

All processes take place in the background, the user is not disturbed on his daily work. Depending on the configuration, they are queried by the administrator prior to installation or system restart.

## CHAPTER 2

# Setup

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## 1.1 Delegate, activate and assign

---

In the «Infrastructure» overview, select the «Endpoint Protection» agent and display the delegation with «Assign» in the ribbon menu:

- Select the company to which the agent belongs as for the user rights.

In the «Infrastructure» overview, select the «Endpoint Protection» agent and activate the agent with «Activate» in the ribbon menu.

Assign the agent to the "organisations" tree structure by drag&drop in order for the updates and groups to be available for all Columbus Management Client.

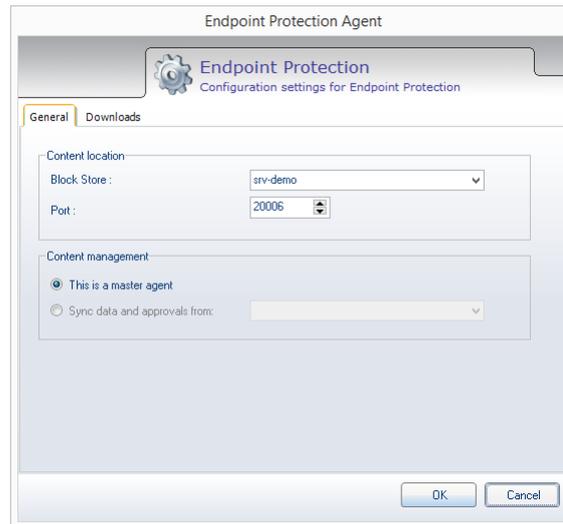
<b>Important</b>	The UpdateManagement Agent can only be assigned by drag&drop if it was defined as Master and has a Block Store assigned.
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## 1.2 Settings

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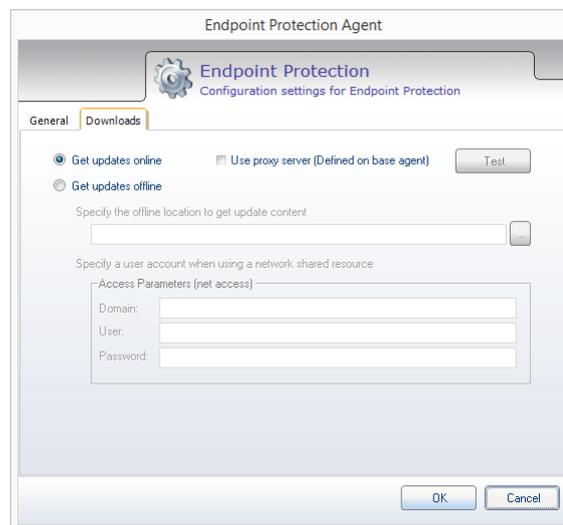
In the «Infrastructure» overview, select the «Endpoint Protection» agent and display the configuration with «Configure» in the ribbon menu.

## 1.2.1 General



Parameter	Explanation
Block Store & Port	Block Store used by the Endpoint Protection Agent to store catalogs and updates. Default port: 20006
Master / Sync from	Define as Master or set as synchronization source.

## 1.2.2 Downloads



Parameter	Explanation
Online	The catalogs and the updates that have been released for use are obtained through internet connection.
Offline	The catalogs and updates are obtained from a storage location through file access. This enables the operation of Columbus UpdateManagement in protected network environments.

**Important** An additional application is required on a computer in the DMZ for offline operation.

## 1.3 Replication on a Site Server

If additional *Block Stores* are used, the relevant *Endpoint Protection Agent* can carry out the updates replication by the Master.

In the «Infrastructure» overview, select the *Endpoint Protection Agent* of a Site Server and display the delegation with «Assign» in the ribbon menu:

- Select the company to which the Agent belongs as for the user rights.

In the «Infrastructure» overview, select the «Endpoint Protection» agent and activate the agent with «Activate» in the ribbon menu.

**Important** The UpdateManagement Agent is **not** assigned to the tree structure by drag&drop. This is for the Master only.

## 1.4 Settings

In the «Infrastructure» overview, select the «Endpoint Protection» agent and display the configuration with «Configure» in the ribbon menu.

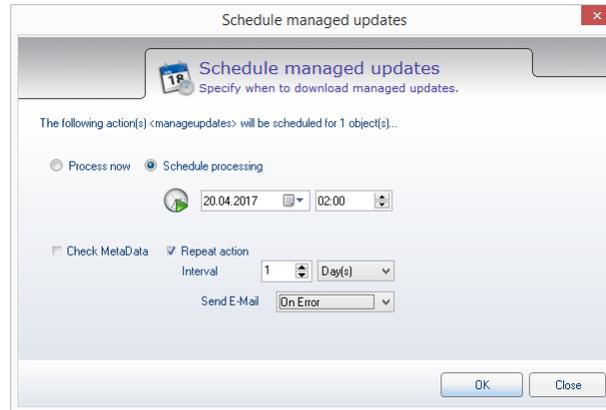
### 1.4.1 General



Parameter	Explanation
Block Store & Port	Block Store used by the Endpoint Protection Agent to store catalogs and updates. Default port: 20006
Master / Sync from	Select the Master Agent used as source for synchronization.

## 1.5 Download / Synchronize

In the "Infrastructure" overview, select the «Endpoint Protection» agent and start planning an action with «Download Updates» in the ribbon menu.



Parameter	Explanation
Check MetaData	The data on the Block Store are checked, the blocks without reference are removed.
Send e-mail	Level from which a message shall be sent.

CHAPTER 3

# Configuration

## In this chapter

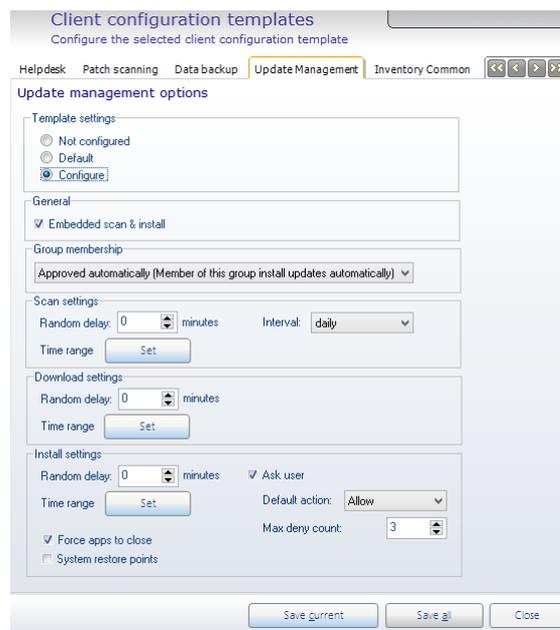
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## 2.1 Create client configuration

Call up the configuration for Columbus Management Client in the ribbon menu "Devices" with «Client Templates». On the left, existing configurations can be managed or new ones can be created.

## 2.2 Configure UpdateManagement

Call up the configuration for Columbus Management Client in the ribbon menu "Devices" with «Client Templates». Display the settings on the "UpdateManagement" tab:

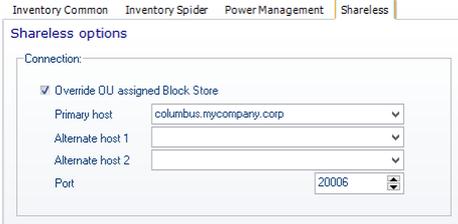


Parameter	Explanation
Template settings	Select whether not to configure, use default configuration or enter custom settings.
Embedded scan & install	Switch ON or OFF the UpdateManagement function integrated in Columbus Management Client.

Group membership	Enter an update group to be used as reference for available updates (see "Manage update groups").
Scan settings	
Random delay	Setting a random delay when a time frame is reached before an action is started (as load distribution, e.g. on virtualized systems).
Interval	Frequency at which an update scan shall be executed.
Time range	Configurable time frame (blue) during which the action can be executed.
Ask user	Configuration whether the user shall be prompted before an update installation or a system restart, what is the default action and how often can the user delay it.
System restore points	Before updates are installed, Windows system restore points can be set.

## 2.3 Configuring Shareless (Block Store)

The block store assigned to the tree structure (see "Site Management" -> "Infrastructure") can be overridden using the client configuration. We recommend the use of DNS Alias to allow for a short communication path for the clients according to the network.



### 2.3.1 Save current or Save all

When the "Save current" menu item is used, only the configurations of the currently opened tab are saved in the database. When "Save all" is used, all tabs are saved.

## 2.4 Assign client configuration

Call up the configuration for Columbus Management Client in the ribbon menu "Devices" with «Client Templates». The configurations listed on the left can be assigned to an organization tree structure node by drag & drop.

CHAPTER 4

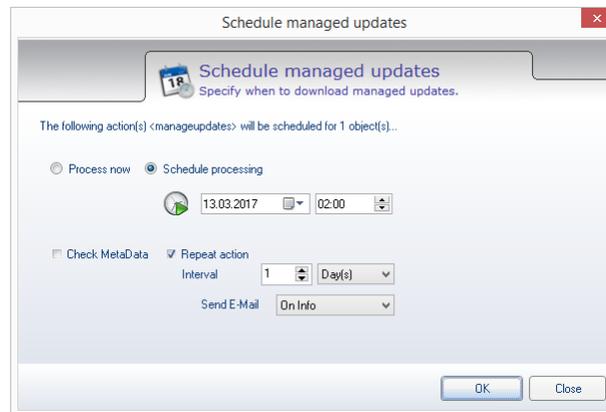
# Using

## In this chapter

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 Managing update groups on the complete system ..... 16  
 Managing the status of individual computers..... 16

## 3.1 Obtaining catalogs, updates and synchronization of a block store.

In the «Infrastructure» overview, select the «Endpoint Protection» agent and display the schedule with «Download Updates» in the ribbon menu:

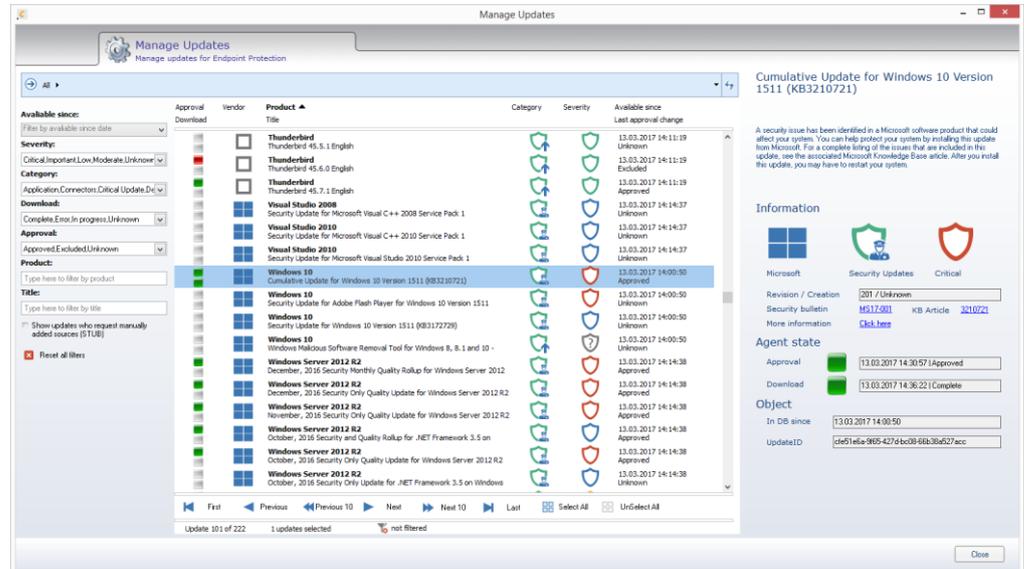


Parameter	Explanation
Process now	Catalogs and updates that have been released for use are received once (online, offline or as synchronization).
Schedule	Schedule catalogs and updates that have been released for use as a daily action (online, offline or as synchronization).
Check MetaData	Inspecting the consistency of the custom block store.

**Important** The same action is used for downloading catalogs and updates from the Internet and for synchronizing data from a block store.

## 3.2 Managing updates on the complete system

In the «Infrastructure» overview, select the «Endpoint Protection» agent and display the updates management with «Manage Updates» in the ribbon menu:



**Important** The list of the managed updates is empty until at least one client has transferred its scan results.

In the list display, use the right mouse button to modify the treatment / release of individual updates on the context menu:

Parameter	Explanation
Unknown	The update is not downloaded and stored in the block store. The computers on which the update is missing are reported.
Exclude	The update is not downloaded and stored in the block store. The update is not mentioned on any status report and is completely hidden.
Approve	The update is downloaded and stored in the block store. Depending on the definition by the group or by manual setting per device, the update is released for installation.

**Important** For the Columbus system, excluded updates are considered as non-existent.

### 3.2.1 STUB updates

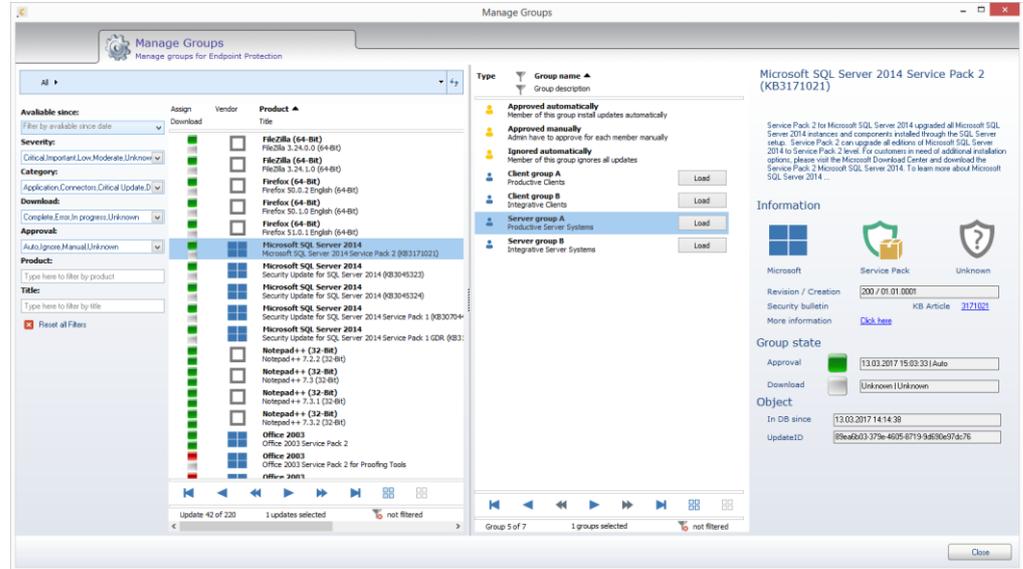
STUB (Source file to update briefing) are updates that can only be obtained from the manufacturer privately or indirectly:

- User accounts for authentication
- License-dependent
- Not supported download protocols

The installation file for STUB updates can be written in the block store using the "Add/Replace source file" function. After that, the same processes as for conventional updates are valid.

## 3.3 Managing update groups on the complete system

In the «Infrastructure» overview, select the «Endpoint Protection» agent and display the updates management with «Manage Groups» in the ribbon menu:

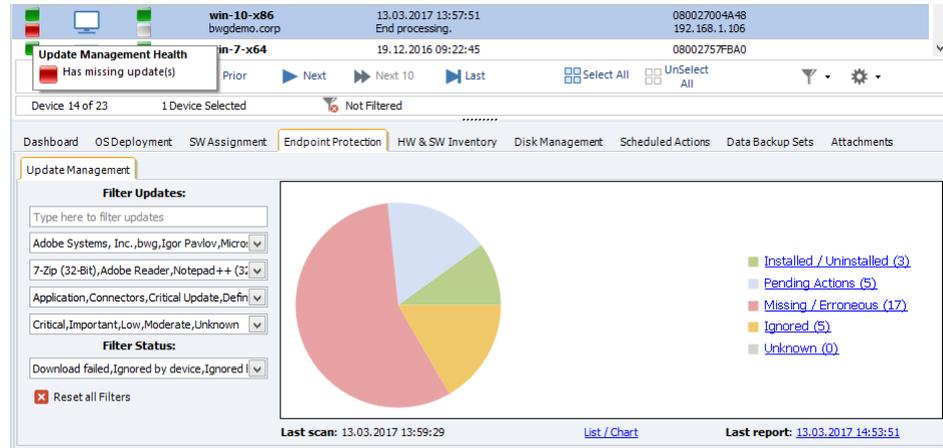


An individual behavior can be assigned to each group per update using the right mouse button on the context menu:

Parameter	Explanation
Ignore	The update shall not be installed nor uninstalled.
Manual	The update must be released individually for each computer by an administrator.
Auto	The update is installed automatically by the management client.

## 3.4 Managing the status of individual computers

In the «Devices» overview, select an entry in the list of managed computers. In the "Endpoint Protection" tab, select the "UpdateManagement" tab to display the last scan results:



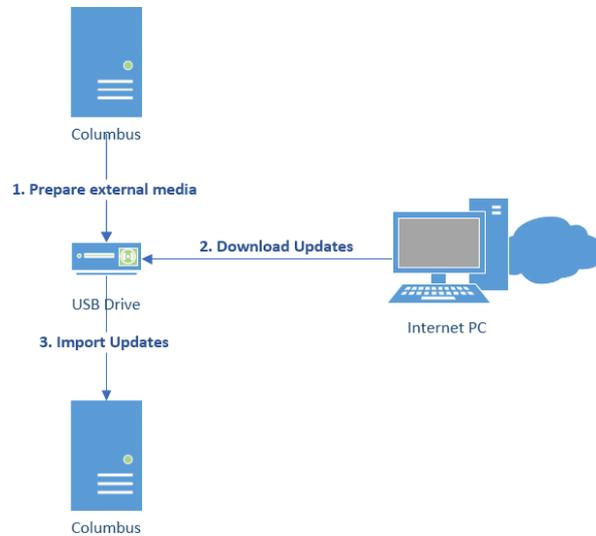
In the list display, use the right mouse button to modify the treatment / release of individual updates on the context menu:

Parameter	Explanation
Install	The update can be installed on this computer (if previously set to manual on the group).
Uninstall	The update must be uninstalled (this menu item is only available if the relevant update has an uninstall routine).
Ignore	The update shall not be installed nor uninstalled.
None	No special regulation, the group definition is applied.

**Important** The updates must be released by Agent on the complete system before they can be set to manual release.

## 3.5 Getting updates offline

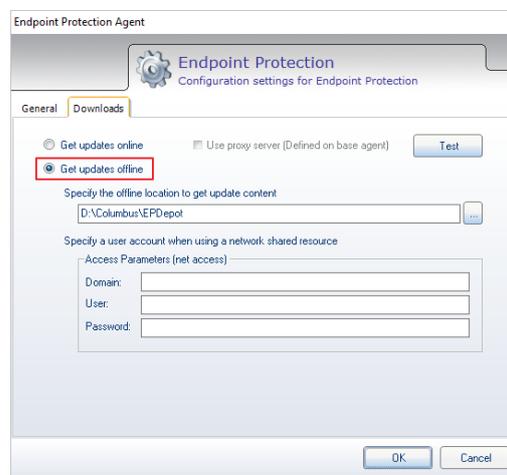
If the Columbus server does not have direct Internet access, the patches can also be obtained from an external source. The following section describes the procedure for downloading the patches from an "Internet PC" and transferring them to the Columbus infrastructure. For this, the 3 illustrated steps are necessary



1. Creating a transfer media (USB Drive)
2. Download Update from a Computer with internet access
3. Load Patches into Columbus UpdateManagement library

### 3.5.1 Configuration

To download the patches from an external source, you must adjust the configuration as follows. In the "Infrastructure" overview, select the agent "Endpoint Protection" and display the configuration in the ribbon menu with "Configure".



In the tab "Downloads", select the option "Get Updates Offline". If you require a proxy for Internet access, you can enter this information.

## 3.5.2 Download Patches

### Create media

For transferring the update information, external hard drives or USB sticks can be used. For the initial download of the patches, free space of about 25-30GB is needed. The incremental updates are then much smaller.

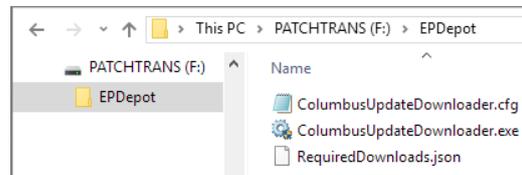
1. Create the directory USB:\EPDepot on the external drive
2. Run the "Download Updates" action on the "Endpoint Protection" agent.

This action generates a table of contents of the needed patches. The content directory is stored on the Columbus Share (or, depending on the configuration in the EP agent) under "...\Columbus\EPDepot\RequiredDownloads.json".

3. Copy the file "RequiredDownloads.json" into the previously created directory on the USB stick.

4. Navigate to the directory "C: \ Program Files (x86) \ Columbus \ Tools" and copy the files "ColumbusUpdateDownloader.exe" and "ColumbusUpdateDownloader.cfg" into the previously created directory on the USB stick.

The USB stick should now contain the following content:



#### Important

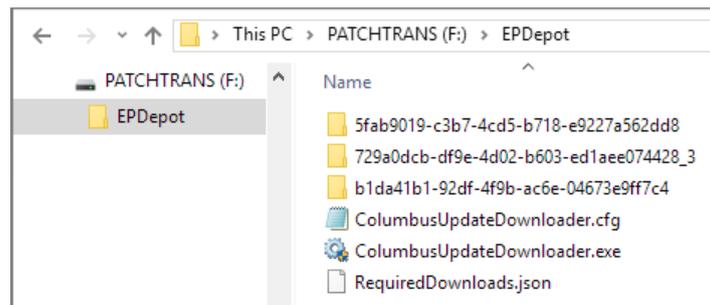
Before you start the download Delete all existing folders in USB:\EPDepot. so that only the above 3 files are present

## Initiate download

Connect the previously created medium to a PC connected to the Internet. Run "ColumbusUpdateDownloader.exe" to start the download.

```
F:\EPDepot\ColumbusUpdateDownloader.exe
Load settings: found settings file <F:\EPDepot\ColumbusUpdateDownloader.cfg> to load...
Using license ID <42c2c56c-04f1-4f36-aaef-ae6e59780b51>...
Using required downloads file <F:\EPDepot\RequiredDownloads.json>...
Checking if the current license for <42c2c56c-04f1-4f36-aaef-ae6e59780b51> is valid, please wait...
license check was successful, license is valid.
-----
There are 2 catalogues to process...
Processing catalogue item (1 of 2) that needs to be downloaded...
Processing catalogue <Microsoft>, folder <b1da41b1-92df-4f9b-ac6e-04673e9ff7c4>, filename <wsusscn2.cab> and URL <http://go.microsoft.com/fwlink/?LinkID=74689>
Starting download from <http://go.microsoft.com/fwlink/?LinkID=74689>...
```

After completing the downloads, there are now further folders with the patches available, which will now be transferred to the Columbus server



**Note** The patches with the ID's "b1da41b1-92df-4f9b-ac6e-04673e9ff7c4" and "5fab9019-c3b7-4cd5-b718-e9227a562dd8" are the patch catalogs. If you only the catalogs want to update, just copy them to the server.

## Add patches to the store

1. Connect the transfer medium to your workstation or server.
2. Copy the patches from "USB:\EPDepot" to "Server:\Columbus\EPDepot".

**Important** The existing folders must be overwritten

3. Run the "Download Updates" action on the "Endpoint Protection" agent to read the patches into the block store

### 3.5.3 Operation

When operating in offline mode, note that new patches will not be recognized until a new catalogue is available. This means that the steps under "Load patches" must therefore be carried out once for updating the catalogs and then for the newly detected patches. It is recommended to wait 1-2 days between updating the patch catalog and updating the patches.

CHAPTER 5

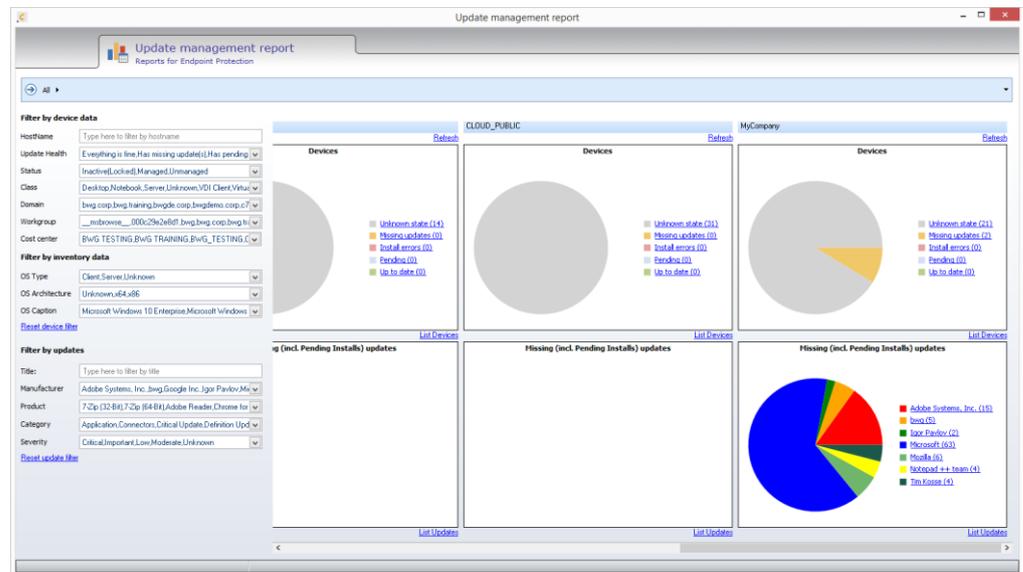
# Reports / overviews

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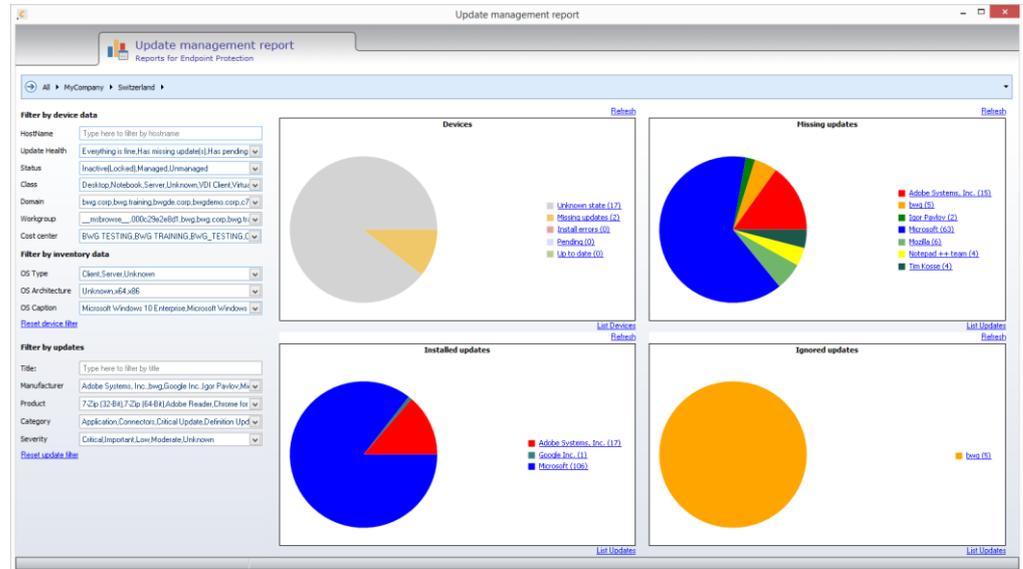
## 4.1 General overview of the organization

A general overview of all managed computers can be seen by selecting "Reporting" and "UpdateManagement" in the ribbon menu.



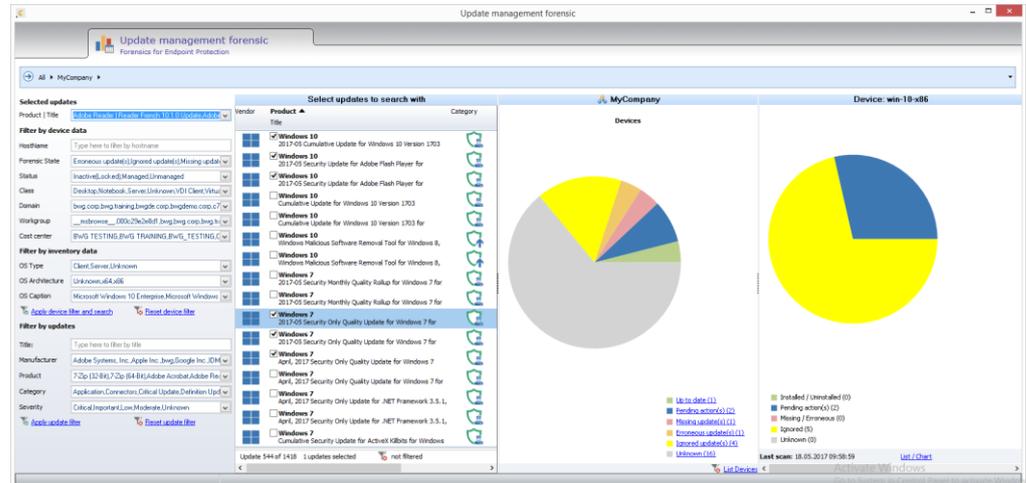
## 4.2 Overview of an individual site

Use the horizontal navigation to navigate through the organization. The results are cumulative (all computers of the selected site and its subsites are displayed):



## 4.3 Forensic view

Select "Reporting" and "Update Forensic" in the ribbon menu to start a forensic search to see if the computer is potentially at risk.



Identifying computers on which updates are missing:

- Enter the name of an update to the left of the navigation panel, in the field *Update Title*.
  - E.g. 4019112
- Activate the filtering by clicking once on *Apply update filter*.
- Select the required updates in the *Select updates to search with* overview.
  - For details on the update, double-click the entry.
  - If several updates must be checked, repeat this step.
  - The selected updates are listed in the *Selected updates* box.
- Additional filter for the computer can be set under *Device data*.
  - Only specific domains, device classes or Windows families
- The results are displayed by clicking once on "Apply device filter and search".
- In the company panel, display a list of computers by clicking once on "List Devices" or on a computer status.
  - The details of the required updates are displayed by clicking once on a computer.
  - If an updated has been ignored so far, an update release on a computer can be modified in the context menu.