Every documentation provided by the brainwaregroup is subject to copyright and owned by the brainwaregroup. The brainwaregroup does not guarantee nor accepts the legal responsibility or any liability whatsoever for the usage of this information, for their economic feasibility or error-free function for a certain purpose.

In the compilation of this document, every effort has been undertaken to ensure the correctness of the content. However, the brainwaregroup does not offer any guarantee related to this documentation nor does it offer a legal warranty for the marketable quality and suitability for a certain purpose. Furthermore, the brainwaregroup cannot be held liable for errors or unintended damages or consequential damages in relation with the provision, performance or usage of this document or the examples contained therein. The brainwaregroup reserves its right to change this documentation anytime without prior notice.

All names, company names or companies used in this document are fictitious and do not refer, neither in name nor content, to actually existing names, organizations, legal persons or institutions nor shall they represent them. Any similarity to existing people, organizations, legal persons or institutions is merely coincidental.

The software described in this document is provided under the terms of a license contract and should be used exclusively in accordance with the terms of this agreement.

**Document title**  
Columbus 7.6 - Migration-Guide

**Product version**  
7.6

**Production and printing**  
Brainware Consulting & Development AG  
Sumpfstrasse 15  
CH-6300 Zug

**Release date**  
12.12.2018

Neither the whole document nor parts of it may be copied, photocopied, reproduced or processed without prior written approval of the brainwaregroup.
## Content

<table>
<thead>
<tr>
<th></th>
<th>Preparation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Requirements</td>
<td>6</td>
</tr>
<tr>
<td>1.1</td>
<td>License conversion</td>
<td>6</td>
</tr>
<tr>
<td>1.2</td>
<td>Spider implementation</td>
<td>6</td>
</tr>
<tr>
<td>1.3</td>
<td>Installation file</td>
<td>6</td>
</tr>
<tr>
<td>1.4</td>
<td>License file</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Preliminary work</td>
<td>7</td>
</tr>
<tr>
<td>2.1</td>
<td>DNS Columbus-Server</td>
<td>7</td>
</tr>
<tr>
<td>2.2</td>
<td>Columbus share</td>
<td>7</td>
</tr>
<tr>
<td>2.3</td>
<td>Client configuration templates</td>
<td>7</td>
</tr>
<tr>
<td>2.4</td>
<td>Test devices for OS deployment</td>
<td>7</td>
</tr>
<tr>
<td>2.5</td>
<td>SQL Server</td>
<td>7</td>
</tr>
<tr>
<td>2.6</td>
<td>Prepare the server</td>
<td>8</td>
</tr>
<tr>
<td>2.7</td>
<td>Lock the Columbus server</td>
<td>8</td>
</tr>
<tr>
<td>2.8</td>
<td>Backup</td>
<td>8</td>
</tr>
<tr>
<td>2.9</td>
<td>User names and passwords</td>
<td>8</td>
</tr>
<tr>
<td>2.10</td>
<td>WinPE</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Migration</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Emergency Stop</td>
<td>9</td>
</tr>
<tr>
<td>2.2</td>
<td>Database Backup</td>
<td>9</td>
</tr>
<tr>
<td>2.3</td>
<td>Stop Infrastructure Service</td>
<td>9</td>
</tr>
<tr>
<td>2.4</td>
<td>Making sources available</td>
<td>9</td>
</tr>
<tr>
<td>2.5</td>
<td>Installation of Columbus 7.5</td>
<td>10</td>
</tr>
<tr>
<td>2.5.1</td>
<td>License file</td>
<td>10</td>
</tr>
<tr>
<td>2.5.2</td>
<td>Component selection</td>
<td>10</td>
</tr>
<tr>
<td>2.5.3</td>
<td>Available options</td>
<td>10</td>
</tr>
<tr>
<td>2.5.4</td>
<td>Firebird settings</td>
<td>10</td>
</tr>
<tr>
<td>2.5.5</td>
<td>SQL connection and users</td>
<td>10</td>
</tr>
<tr>
<td>2.5.6</td>
<td>SQL Database</td>
<td>10</td>
</tr>
<tr>
<td>2.5.7</td>
<td>Columbus SQL login</td>
<td>10</td>
</tr>
<tr>
<td>2.5.8</td>
<td>Columbus system administrator</td>
<td>10</td>
</tr>
<tr>
<td>2.5.9</td>
<td>Legacy, Smart and Linux Deployment – Defaults</td>
<td>11</td>
</tr>
<tr>
<td>2.5.10</td>
<td>Install &amp; close</td>
<td>11</td>
</tr>
</tbody>
</table>
## Purging

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Purging</td>
</tr>
<tr>
<td>3.1</td>
<td>Check Brainware.log</td>
</tr>
<tr>
<td>3.2</td>
<td>WinPE10.0 driver</td>
</tr>
<tr>
<td>3.3</td>
<td>Default template</td>
</tr>
<tr>
<td>3.4</td>
<td>Client rollout</td>
</tr>
<tr>
<td>3.5</td>
<td>Console rollout</td>
</tr>
<tr>
<td>3.6</td>
<td>Infra rollout</td>
</tr>
<tr>
<td>3.7</td>
<td>Inv rollout</td>
</tr>
<tr>
<td>3.8</td>
<td>OS depot</td>
</tr>
<tr>
<td>3.8.1</td>
<td>SmartDeploy</td>
</tr>
<tr>
<td>3.8.2</td>
<td>LegacyDeploy</td>
</tr>
<tr>
<td>3.9</td>
<td>SW depot</td>
</tr>
<tr>
<td>3.10</td>
<td>Auto update</td>
</tr>
<tr>
<td>3.11</td>
<td>Columbus agents</td>
</tr>
<tr>
<td>3.11.1</td>
<td>Columbus base agent</td>
</tr>
<tr>
<td>3.11.2</td>
<td>Block store</td>
</tr>
<tr>
<td>3.11.3</td>
<td>COM Interface</td>
</tr>
<tr>
<td>3.11.4</td>
<td>Endpoint Protection</td>
</tr>
<tr>
<td>3.11.5</td>
<td>Indexing and network scanner</td>
</tr>
<tr>
<td>3.11.6</td>
<td>Inventory collection</td>
</tr>
<tr>
<td>3.11.7</td>
<td>LDAP synchronisation</td>
</tr>
<tr>
<td>3.11.8</td>
<td>OS deployment</td>
</tr>
<tr>
<td>3.11.9</td>
<td>Patch deployment</td>
</tr>
<tr>
<td>3.11.10</td>
<td>Preboot services</td>
</tr>
<tr>
<td>3.11.11</td>
<td>REST</td>
</tr>
<tr>
<td>3.11.12</td>
<td>Replication</td>
</tr>
<tr>
<td>3.11.13</td>
<td>Reporting and cleanup</td>
</tr>
<tr>
<td>3.11.14</td>
<td>SW deployment</td>
</tr>
<tr>
<td>3.12</td>
<td>Management server and variables</td>
</tr>
<tr>
<td>3.13</td>
<td>DNS conversion</td>
</tr>
<tr>
<td>3.14</td>
<td>Server reboot</td>
</tr>
<tr>
<td>3.15</td>
<td>Hard-coded variables and paths</td>
</tr>
</tbody>
</table>

## Completion

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Completion</td>
</tr>
<tr>
<td>4.1</td>
<td>Testing Columbus client push</td>
</tr>
<tr>
<td>4.2</td>
<td>Testing OSDeploy (Legacy Deploy)</td>
</tr>
<tr>
<td>4.2.1</td>
<td>Starting OSDeploy</td>
</tr>
<tr>
<td>4.2.2</td>
<td>PDHCP &amp; WinPE download</td>
</tr>
<tr>
<td>4.2.3</td>
<td>Loading WinPE &amp; installing the operating system</td>
</tr>
<tr>
<td>4.2.4</td>
<td>Jobs</td>
</tr>
<tr>
<td>4.3</td>
<td>Testing Columbus client autoupdate</td>
</tr>
<tr>
<td>4.4</td>
<td>Testing SWDeploy</td>
</tr>
<tr>
<td>4.5</td>
<td>Testing Columbus Inventory scan</td>
</tr>
<tr>
<td>4.6</td>
<td>Testing OSDeploy (Smart Deploy)</td>
</tr>
<tr>
<td>4.6.1</td>
<td>Create OS release</td>
</tr>
<tr>
<td>4.6.2</td>
<td>Configuring the device</td>
</tr>
<tr>
<td>4.6.3</td>
<td>Starting OSDeploy</td>
</tr>
<tr>
<td>4.6.4</td>
<td>PDHCP &amp; WinPE download</td>
</tr>
<tr>
<td>4.6.5</td>
<td>Loading WinPE &amp; installing the operating system</td>
</tr>
</tbody>
</table>
5 Migration Site Server

5.1 Site Server migration using setup

5.2 Rollout infrastructure server

5.3 Infrastructure Service Agents

5.3.1 Base

5.3.2 Block store

5.3.3 COM Interface

5.3.4 Endpoint Protection

5.3.5 Indexing and network scanner

5.3.6 Inventory collection

5.3.7 LDAP synchronisation

5.3.8 OS deployment

5.3.9 Patch deployment

5.3.10 Preboot services

5.3.11 REST

5.3.12 Replication

5.3.13 Reporting and cleanup

5.3.14 SW deployment

5.4 Management server and variables

6 Database server change

6.1 General

6.1.1 Variants

6.2 Back up existing databases

6.2.1 Stopping Columbus Infrastructure services

6.2.2 Database Backup

6.3 Restore databases

6.3.1 Stopping Columbus Infrastructure services

6.3.2 Restore databases

6.4 Post configuration

6.4.1 Remap of SQL user ColumbusRW

6.4.2 Setting database paths

6.4.3 Update license server (OTB Move)

6.4.4 Update the connection settings

6.4.5 Update Central Task Manager (OTB Move)
CHAPTER 1

Preparation

In this chapter
Requirements ................................................................. 6
Preliminary work ............................................................ 7

1.1 Requirements

1.1.1 License conversion

- License conversion completed (for 7.3 or older)

Attention If the license has not yet been converted, please contact the Brainware Sales Department. Migration is not possible without conversion.

1.1.2 Spider implementation

- Previously agree on the Spider mandators ID with a Spider consultant. (for 7.3)
- Check the OTB connection information of the Spider Data Receiver with the Spider mandator ID and agree upon it with the Spider consultant. (for 7.4.0 or newer)

Attention If Spider is used, the inventory data can be sent to a Spider system. Please inform a Spider Consultant about the migration.

1.1.3 Installation file

- Download the current Columbus 7.5.0 installation file.

1.1.4 License file

- Prepare a license file valid for Columbus 7.5.0.
1.2 Preliminary work

1.2.1 DNS Columbus-Server

**Important**

The Columbus communication can deal with DNS aliases instead of fixed specifications of server names. This facilitates the configuration e.g. in the case of a server change or the use of site servers in branch offices. If DNS aliases are used, please refer to this chapter.

- Setting up DNS aliases
- Test of DNS FQDN resolution and accessibility from all networks

**Attention**

A conversion from FQDN to the DNS alias would necessarily have to be carried out prior to the update.

1.2.2 Columbus share

- Create the directory D:\Columbus on the server and grant NTFS rights.
- Set up Columbus UNC share on the server and test it (Hostname & DNS alias).

1.2.3 Client configuration templates

- E-Mail to employees regarding a possible restart (in case of modification OTB server).
- Adjust the client configuration templates at an off-peak period if required. (After Columbus share has been completed).

**Attention**

Modifying the OTB server may trigger a reboot at the clients!

- On company level, enter the variables _AdminServer, _AdminPath and _SWAdmin and specify them with the former Network Access value from the default template. (Only if Network Access had any contents).
- Register Client Default – Empty Network Access and store.

**Attention**

Network Access is resolved on the Clients into _AdminServer, _AdminPath and _SWAdmin. If these variables are used in packages, the packages must be adjusted or the variables must be set on company level.

1.2.4 Test devices for OS deployment

- Obtain test devices for OS deployment.
- Execute the test with this device for OSDeploy & SWDeploy.

1.2.5 SQL Server

- The future SQL Server must be provided.

**Attention**

The SQL Server can be operated locally on the Master Server or on a remote server in the network.
1.2.6 Prepare the server

- Execute the Power Shell Script Prepare2016forColumbus.ps1. (IIS & .NET Framework 4.6)
  https://support.brainwaregroup.com/kb/article/AA-00984/25/

1.2.7 Lock the Columbus server

- In the Management Console, activate the Emergency Stop and leave it that way.

1.2.8 Backup

- Create a system backup or snapshot of the Columbus server?

1.2.9 User names and passwords

- User name and password for SQL SA User, columbusrw, sysdba & Columbus-AD-Admin (domain account) available in clear text.

1.2.10 WinPE

- Obtain a WinPE10 driver from the main suppliers.
Chapter 2

Migration

In this chapter

- Emergency Stop ................................................................. 9
- Database Backup ............................................................. 9
- Stop Infrastructure Service .................................................. 9
- Making sources available ................................................... 9
- Installation of Columbus 7.5 ............................................... 10

2.1 Emergency Stop

- Check that the Emergency Stop has been set.

2.2 Database Backup

- Database was backed up.

2.3 Stop Infrastructure Service

- Stop all infrastructure servers and the site server via the «Stop Infrastructure Server» batch.
- Check that the processes «BWInfra.exe», «NotificationSvc.exe» & «PrelogServer.exe» have stopped.

2.4 Making sources available

- Copy the source on the server.
2.5 **Installation of Columbus 7.5**

- Start the latest installation file for the Columbus installation directly. *(Columbus_7.5.0.exe)*

2.5.1 **License file**

- Select the correct license file for the 7.5.0 version.

2.5.2 **Component selection**

- Select the Master option.
- Enter the FQDN of the Columbus Master Server correctly.

**Attention**  For the installation of a Site Server, use the rollout from the Management Console whenever possible.

2.5.3 **Available options**

- The option Prepare Autoupdate for Management Client must be active to execute a migration.

2.5.4 **Firebird settings**

- Save the Database path to the existing Columbus Firebird DB.
- Save the user name of the Columbus User *(ColumbusRW)* and the related password.
- Enter the SYSDBA password.

2.5.5 **SQL connection and users**

- Enter the SQL server name (with instance name in case of the Express edition).
- If the logged-in Windows user has no administrative rights on the SQL Server, the SQL login must be activated and a user having administrative rights must be entered with password.

2.5.6 **SQL Database**

- Enter the prefix and/or the suffix for the Databases if required.

2.5.7 **Columbus SQL login**

- User name and password used by the Columbus Infrastructure Service to access the SQL Database. *(e.g. ColumbusRW)*

2.5.8 **Columbus system administrator**

- Record the administrator’s password *(sysadmin)* in the Management Console.
2.5.9  Legacy, Smart and Linux Deployment – Defaults

- Enter the default values for Smart Windows OS Deployment.
- Enter the default values for Legacy Linux Deployment.

2.5.10  Install & close

- Terminate the installation without starting the console.
CHAPTER 3

Purging

In this chapter

Check Brainware.log.................................................................12
WinPE10.0 driver ........................................................................12
Default template ........................................................................12
Client rollout .............................................................................13
Console rollout ...........................................................................13
Infra rollout ...............................................................................13
Inv rollout ..................................................................................13
OS depot ....................................................................................14
SW depot ...................................................................................14
Auto update .................................................................................15
Columbus agents .........................................................................15
Management server and variables .............................................17
DNS conversion ...........................................................................17
Server reboot ...............................................................................17
Hard-coded variables and paths................................................17

3.1 Check Brainware.log.

- If all 10 entries, the license ID and the license features were correctly detected with CacheReader thread.
- Start Columbus Management Console.

3.2 WinPE10.0 driver

- Copy the WinPE10 driver files into the correct directories.
- C:\Program Files (x86)\Columbus\Infrastructure\PETemplates\x64\Drivers
- C:\Program Files (x86)\Columbus\Infrastructure\PETemplates\x86\Drivers
- Read in the WinPE10 driver using Inject Windows PE files.

3.3 Default template

- Connection tab - Update and save OTB Server with FQDN from the server.

Attention

Modifying the OTB server will most probably trigger a reboot at the clients!

- Inventory Common tab – Update and save OTB server and port with FQDN.
- Inventory Spider tab – Create and save exception «%WinDir%\WinSxS».
- Save the default template in the file Columbus.cfg.
- Save the inventory configuration in the two files ColumbusInventoryScanner.cfg and ColumbusInventoryAgent.cfg.
### 3.4 Client rollout

- In the C:\Program Files (x86)\Columbus\Console\ClientRollout directory, delete the old Columbus clients.
- Update the file Columbus.cfg in the directory C:\Program Files (x86)\Columbus\Console\ClientRollout\Columbus Client 7.5.0.

### 3.5 Console rollout

- In the C:\Program Files (x86)\Columbus\Console\ConsoleRollout directory, delete the old Columbus clients.
- Copy cmc.ini and accept it in the ConsoleRollout.

### 3.6 Infra rollout

- In the C:\Program Files (x86)\Columbus\Console\InfraRollout directory, delete the old versions.
- Accept all implemented WinPE10 drivers from the processed directories into the drivers directories under InfraRollout\$programfile$\....

### 3.7 Inv rollout

- In the C:\Program Files (x86)\Columbus\Console\InvRollout directory, delete the old versions.
- Accept the configuration file ColumbusInventoryScanner.cfg after InvRollout\Standalone Inventory Scanner 7.5.0.
- Accept the file ColumbusInventoryAgent.cfg after D:\Columbus\InvData\Updates_Agent.
### 3.8 OS depot

#### 3.8.1 SmartDeploy

- Execute `D:\Columbus\OSDepot\jobstore\windows\mandatory\PrepareWUA\ASSETUP\Updates\PatchDownload.ps1` with PowerShell.

**Note** The job "PrepareWUA" includes Windows updates in order to simplify the distribution of updates by Columbus UpdateManagement.

#### 3.8.2 LegacyDeploy

- Execute `D:\Columbus\OSDepot\legacy\NT5\job\PrepareWUA\ASSETUP\Updates\PatchDownload.ps1` mit PowerShell.
- Execute `D:\Columbus\OSDepot\legacy\NT6\job\PrepareWUA\ASSETUP\Updates\PatchDownload.ps1` mit PowerShell.

**Note** The job "PrepareWUA" includes Windows updates in order to simplify the distribution of updates by Columbus UpdateManagement.

- On each Legacy Windows OS release, the three jobs ASetup, S_ADS and PrepareWUA must be copied out of the corresponding source directory `\OSDepot\legacy\NT5\job` or \`\OSDepot\legacy\NT6\job` and must be inserted and replaced in the job directory of the OS release.
- The job Col7 must be updated in each Legacy Windows OS release with the current Columbus client and the corresponding configuration file.
- Both source directories `\OSDepot\legacy\NT5\job` & `\OSDepot\legacy\NT6\job` contain several other jobs that have been updated for Columbus 7.5.0. The existing jobs in the Legacy Windows OS releases must be replaced with the corresponding updated jobs. The additional updated jobs that are not yet included in the Legacy releases must not be reimplemented.

### 3.9 SW depot

- Package 100100_MS_Windows_Activation.UNI
- Package 190100_MS_Windows_10_x64_Inplace_Upgrade.UNI
- Package 190200_MS_Windows_10_x86_Inplace_Upgrade.UNI
- Package 900000_RemotelyAnywhere_12_Config_Client.ENU
- Package 900000_RemotelyAnywhere_12_Config_Server.ENU
- Package 900100_LogMeIn_NetworkConsole_9.ENU
- Package 960000_Columbus_Prepare_For_SmartCapture.UNI
- Implement package 903000_Columbus_PackagingTools_7.UNI and update all source files.

**Note** SW packages which are delivered with Columbus and can be used by the customer without any obligation. The SW packages are not an integral part of the product.
3.10 Auto update

- All files must be updated.

```
<table>
<thead>
<tr>
<th>File</th>
<th>Date modified</th>
<th>Type</th>
<th>Size</th>
<th>File version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbus</td>
<td>03.03.2017</td>
<td>Application</td>
<td>817KB</td>
<td></td>
</tr>
<tr>
<td>ClientUpdate</td>
<td>03.03.2017</td>
<td>Application</td>
<td>442KB</td>
<td>7.5.145</td>
</tr>
<tr>
<td>Collectini</td>
<td>03.03.2017</td>
<td>Application</td>
<td>593KB</td>
<td>7.5.145</td>
</tr>
<tr>
<td>Collectini</td>
<td>03.03.2017</td>
<td>Application</td>
<td>216KB</td>
<td>7.5.145</td>
</tr>
</tbody>
</table>
```

Attention: The file Columbus.cfg must NOT be included in the AutoUpdate directory!

3.11 Columbus agents

3.11.1 Columbus base agent

- General tab - Check and adjust the maintenance time frame.
- Wake-on-LAN tab - Check and adjust the IP subnets and ports.
- Status delivery tab - Adjust the hostname with FQDN or DNS Alias.
- FTP access tab - Adjust the FTP server and FTP root with FQDN or DNS Alias.

3.11.2 Block store

- General tab - Check and adjust the block depot location and the metadata location.

3.11.3 COM Interface

- Checking the current configuration

3.11.4 Endpoint Protection

- Configure > General tab - Fill in the Block Store with FQDN and port.

Important: The Block Store Agent must be necessarily set up if the Endpoint Protection Agent is to be used.
3.11.5 Indexing and network scanner

- Image scanner > Check and adjust the value in Path.
- Schedule > Planned task for the disc Images refresh detected.

3.11.6 Inventory collection

- Configure > Check and adjust Basedir on the inventory agent.
- If Send to Spider Data Receiver is active, check the OTB server, port and customer ID and adjust if required.

3.11.7 LDAP synchronisation

- If the Agent is set up, test its functionality.

3.11.8 OS deployment

- Configure > Adjust the value in the source with FQDN or DNS Alias.
- Schedule > Detect the planned task for Refresh OS Depot Index List.

**Important** The Preboot Service Agent must be necessarily set up if the OS deployment agent is to be used.

3.11.9 Patch deployment

- Checking the current configuration

3.11.10 Preboot services

- Check the standard keyboard and the OTB server for Preboot Services Agent.

3.11.11 REST

- Configure > Enter and save OTB Server as FQDN.

3.11.12 Replication

- Configure Sources > Replication sources settings tab - Check the paths for all replication sets and adjust if required.
- Configure Targets > Replication restore target settings tab - Check the path of all restore target locations and adjust if required.
- Configure Connection > Check the block store for all site servers and adjust if required (default would be the master server).
- Synch Sources > Planned task detected. (at master server)
- Synch Target > Planned task detected. (at site servers)
3.11.13 Reporting and cleanup

- CleanUp tab > Define the history life.
- SW cleanup > Detect the planned task if required.

**Attention**  If a package is removed from the depot, the assignments disappear when the task is run. If the package is reinserted, it is removed from all clients.

3.11.14 SW deployment

- Configure > Job configuration tab - Check and adjust the source path in all jobs.
- Configure > CRC options tab - Check Perform CRC checks on packages and adjust if required.
- Schedule > Planned task for SW Depot Index Refresh detected. (swrefresh)
- Infrastructure > SW Deployment tab > Software tab > Deployment Groups tab > Check the groups and correct in case of error.

**Attention**  If the software groups were not correctly migrated, undesired deinstallations could occur.

3.12 Management server and variables

- Assign the management server with its agents to all sites, companies and organizations if missing.
- Under Site management in the complete structure, check the variables and update if required.
- Infrastructure > Uplink > Infrastructure Uplink - Check the entry on the main server. Depending on cascading, on the assigned OTB server or on itself.

3.13 DNS conversion

- Purge the DNS for the server and for the DNS alias.

3.14 Server reboot

- Restart the Columbus server.

3.15 Hard-coded variables and paths

- In all files in the Columbus directory, search the hard-coded server names using the full-text search and replace with the DNS alias if required.
- In all files in the Columbus directory, search the hard-coded values _AdminServer, _AdminPath und _SWAdmin using the full-text search. If these values are not included, the variables can be deleted on company level.
CHAPTER 4

Completion

In this chapter

Testing Columbus client push.................................................................18
Testing OSDeploy (Legacy Deploy) ..........................................................18
Testing Columbus client autoupdate.........................................................19
Testing SWDeploy ..................................................................................19
Testing Columbus Inventory scan .........................................................19
Testing OSDeploy (Smart Deploy) ...........................................................19

Attention  At this moment, Emergency Stop is still active.

4.1  Testing Columbus client push

• Test Update Columbus Client from the Management Console via Operation > Rollout > Management Client.

4.2  Testing OSDeploy (Legacy Deploy)

4.2.1  Starting OSDeploy

• Let the device stage over the planned task via the Management Console.
• Start the device.

4.2.2  PDHCP & WinPE download

• Receive IP address via DHCP?
• Receive IP address of the TFTP server?
• Correct WinPE.wim file downloaded from the TFTP server?

4.2.3  Loading WinPE & installing the operating system

• Is the correct architecture displayed according to Source.ini?
• Is the IP address displayed?
• Are the MAC address and the hostname displayed?
• Is the OS being installed?
4.2.4 Jobs

- «OS-Deployment in Progress... Please wait» is displayed on the screen (OSDeploy jobs started).
- In the Management Console, the status OS installed successfully is assigned to the device.
- After all jobs are correctly processed, the device remains on the log-in screen.
- Has the complete hardware been detected and equipped with drivers by the device manager?
- Check whether all jobs have been processed as usual.

Important
In the Management Console, the Emergency Stop is still active.

4.3 Testing Columbus client autoupdate

Attention
If something does not run as it should during the test, immediately activate the Emergency Stop again.

- Emergency Stop deactivated.
- Update Columbus-Client by restarting Brainware Columbus Service and clicking on Update.

4.4 Testing SWDeploy

- No Software packages are removed or added spontaneously.
- Assign and install a package on a device.
- Repair a package on a device.
- Remove a package from a device.
- If needed, implement the package for the current Columbus Client Update.

4.5 Testing Columbus Inventory scan

- Run Device > Inventory > Local inventory scan.
- Check whether the last Inventory Scan has provided clean data.
4.6 Testing OSDeploy (Smart Deploy)

4.6.1 Create OS release

- Create Smart Deploy OS release if none is available.
- Fill in the default values in the template (Region/Location, Local Administrator, Domain, Source name, Language and Install key) if none are available.

4.6.2 Configuring the device

- Configure the device with Smart Deploy. (OS release and template)

4.6.3 Starting OSDeploy

- Let the device stage over the planned task via the Management Console.
- Start the device.

4.6.4 PDHCP & WinPE download

- Receive IP address via DHCP?
- Receive IP address of the TFTP server?
- Correct WinPE.wim file downloaded from the TFTP server?

4.6.5 Loading WinPE & installing the operating system

- Is the correct architecture displayed according to Source.ini?
- Is the IP address displayed?
- Are the MAC address and the hostname displayed?
- The OS is being installed.

4.6.6 Jobs

- «OS-Deployment in Progress... Please wait» is displayed on the screen (OSDeploy jobs started).
- In the Management Console, the status OS installed successfully is assigned to the device.
- After all jobs are correctly processed, the device remains on the log-in screen.
- Has the complete hardware been detected and equipped with drivers by the device manager?
- Check whether all jobs have been processed as usual.
Chapter 5

Migration Site Server

In this chapter

Site Server migration using setup .......................................................... 21
Rollout infrastructure server ................................................................. 21
Infrastructure Service Agents ................................................................. 22
Management server and variables ......................................................... 24

5.1 Site Server migration using setup

The migration of a Site Server can also be done through a setup routine. The user is guided and
is prompted to make the corresponding entries.

Setup issue “Could not determine Installation Type”

Columbus 7.5.x setup requires some information from the registry that was not provided by
the 7.4.x setup scripts:

Workaround:

The following registry entry must be previously entered:

[HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Brainware\Columbus\7\Setup]
"IsSite"=dword:00000001

5.2 Rollout infrastructure server

- Device > Operation > Rollout > Infrastructure Server... > Rollout mask.
- Deactivate the agent-based rollout and start the process with rollout.

Attention

- The rollout is executed by the process CMC.exe. Thus, never update more than 5 site servers
  from a Console due to high processor load.
- If possible and if no client update is necessary, restart the Site Server.
5.3 Infrastructure Service Agents

In principle, no Agents are necessarily required on a site server. However, all activated Agents on all Site Servers must be checked and adjusted if required. The Columbus Base Agent is responsible for push and wake on LAN. The Preboot Services Agent is responsible for PXE Boot.

5.3.1 Base

- General tab - Check Activate Forwarding to OTB Server, Host & Port and the maintenance time frame, and adjust if required.
- Wake-on-LAN tab - Check the IP subnets and ports and adjust if required.
  (...\Brainware\Columbus\OS Management\... WOLSubnet\Broadcast & Port)
- Status delivery tab - Adjust the hostname with FQDN or DNS Alias.
- FTP access tab - Adjust the FTP server and FTP root with FQDN or DNS Alias.

5.3.2 Block store

- General tab - Check and adjust the block depot location and the metadata location.
  (obligatory for replication and shareless)

5.3.3 COM Interface

- Checking the current configuration

5.3.4 Endpoint Protection

- Configure > General tab - Fill in the Block Store with FQDN and port.
- Configure > General tab - Set sync data and approvals from.

Important: The Block Store Agent must be necessarily set up if the Endpoint Protection Agent is to be used.

5.3.5 Indexing and network scanner

- Image scanner > Check and adjust the value in Path.
- Schedule > Planned task for the disc Images refresh detected.

5.3.6 Inventory collection

- Configure > Check and adjust Basedir, Forward results, OTB server and OTB Port on Inventory Agent. (for external site server)
- Configure > Check and adjust Basedir, Import results and Send to Spider Data Receiver off. (for internal site server)

5.3.7 LDAP synchronisation

- If the Agent is set up, test its functionality.
5.3.8 OS deployment

- Configure > Adjust the value in the source with FQDN or DNS Alias.
- Schedule > Detect the planned task for Refresh OS Depot Index List.

**Important** The Preboot Service Agent must be necessarily set up if the OS deployment agent is to be used.

5.3.9 Patch deployment

- Checking the current configuration

5.3.10 Preboot services

- Check the standard keyboard and the OTB server for Preboot Services Agent.

5.3.11 REST

- Configure > Enter and save OTB Server as FQDN.

5.3.12 Replication

- Configure Sources > Replication sources settings tab - Check the paths for all replication sets and adjust if required.
- Configure Targets > Replication restore target settings tab - Check the path of all restore target locations and adjust if required.
- Configure Connection > Check the block store and adjust if required (default would be the Master Server)
- Synch Sources > Planned task detected. (for Master Server)
- Synch Target > Planned task detected. (for Site Server)

5.3.13 Reporting and cleanup

- CleanUp tab > Define the history life.
- SW cleanup > Detect the planned task if required.

**Attention** If a package is removed from the depot, the assignments disappear when the task is run. If the package is reinserted, it is removed from all clients.
5.3.14 SW deployment

- Configure > Job configuration tab - Check and adjust the source path in all jobs.
- Configure > CRC options tab - Check Perform CRC checks on packages and adjust if required.
- Schedule > Planned task for SW Depot Index Refresh detected. (swrefresh)

5.4 Management server and variables

- Assign the Site Server with its agents to all sites, companies and organizations if missing.
- Delete all old Site Servers.
- Under Site management in the complete structure, check the variables and update if required.
- Infrastructure > Uplink > Infrastructure Uplink - Check the entry on the main server. Depending on cascading, on the assigned OTB server or on itself.
In this chapter

General ................................................................. 25
Back up existing databases .................................... 25
Restore databases ...................................................... 28
Customize databases .................................................. 31

6.1 General

6.1.1 Variants

There are basically two different types of migration. The «Central Task Manager is the server where the DB is located.

- SQL DB on a new host and Central Task Manger stays on the old server
- SQL DB and Central task manager will be reallocated to a new server

The second option is called «(OTB-Move)» and will be referenced in the title or header of a step. If «(OTB-Move)» is mentioned, the following steps are required. If the Central Task Manager moves with the database. Otherwise, skip these steps

6.2 Back up existing databases

6.2.1 Stoping Columbus Infrastructure services

Before starting the migration, stop all infrastructure Services as listed below. Do these changes for the Master (Central Task manager) and ALL site servers if available.
6.2.2 Database Backup

In order to migrate the databases to a new server, all Columbus related databases have to be saved. The needed steps are provided as example with the Audit database. Apply the same steps for the Columbus and Endpoint database.

- Open the SSMS and logon as a user with appropriate administration rights
- Select the desired Database as listed above
- Open contextual menu > Tasks > Back Up...

- Select “Back up to Disk” and define a destination file.
After all databases have been backed up, the following files will be available:

<table>
<thead>
<tr>
<th>File</th>
<th>Date Modified</th>
<th>Type</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>TextAidPoint.bak</td>
<td>12/01/2017 10:30</td>
<td>BAK File</td>
<td>2066 KB</td>
</tr>
<tr>
<td>TestAudit.bak</td>
<td>12/05/2017 10:30</td>
<td>BAK File</td>
<td>2066 KB</td>
</tr>
<tr>
<td>TestColumbus.bak</td>
<td>12/09/2017 10:30</td>
<td>BAK File</td>
<td>2066 KB</td>
</tr>
</tbody>
</table>

Copy these files to the new SQL Server.
6.3 Restore databases

6.3.1 Stoping Columbus Infrastructure services

Before starting the restore, stop all infrastructure Services as listed below. Do these changes for the Master (Central Task manager) and ALL site servers if available.

<table>
<thead>
<tr>
<th>Service Name</th>
<th>Status</th>
<th>Start Type</th>
<th>Type of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client License Service (CPU)</td>
<td>Running</td>
<td>Manual/Trig.</td>
<td>Local System Service</td>
</tr>
<tr>
<td>CNS Key Issuance</td>
<td>Running</td>
<td>Manual/Trig.</td>
<td>Local System Service</td>
</tr>
<tr>
<td>Columbus Infrastructure Srv...</td>
<td>Running</td>
<td>Automatic</td>
<td>Local System Service</td>
</tr>
<tr>
<td>Columbus Infrastructure Srv...</td>
<td>Running</td>
<td>Automatic</td>
<td>Local System Service</td>
</tr>
<tr>
<td>Columbus Notification Srv...</td>
<td>Running</td>
<td>Automatic</td>
<td>Local System Service</td>
</tr>
<tr>
<td>COM+ Event System</td>
<td>Running</td>
<td>Automatic</td>
<td>Local Service</td>
</tr>
<tr>
<td>COM+ System Application</td>
<td>Running</td>
<td>Manual</td>
<td>Local System Service</td>
</tr>
<tr>
<td>Computer Browser</td>
<td>Running</td>
<td>Disabled</td>
<td>Local System Service</td>
</tr>
</tbody>
</table>

6.3.2 Restore databases

Restore all 3 databases on the new server using the SSMS and the procedure as described below. Execute these advises for all 3 Columbus Databases “Columbus”, Endpoint” and “Audit”.

- Open the SSMS and logon as a user with appropriate administration rights
- Select the desired Database as listed above
- Open contextual menu > Restore Database
Select “Device” and select the desired database.

At the Files tab, select **Relocate all files to folder** otherwise the path may be wrong.
- Select **Overwrite the existing database** if a database with the same name already exists.
- Press **OK** to start the restore

After a successful restore, the databases will be visible in the SSMS
6.4 Post configuration

6.4.1 Remap of SQL user ColumbusRW

Background information

An SQL with mixed authentication enabled manages the users locally. Every user has therefore an identification ID (GUID). During an export of a database, this GUID will be exported within the DB and will not match the new servers local authentication. Although the user ColumbusRW has the same name.

Trying to assign the user manually will bring up an error, the user already exists.
**Fix it**

Use the Columbus AdminConsole (C:\Program Files (x86)\Columbus\Tools\AdminConsole.exe). Starte the tool and connect with an administrative user.

Correct the user mapping with *Reset user logins*. Use this function on all 3 databases (Columbus, Endpoint and Audit).

Review the mappings using the *User Mapping* tab in the *Properties* dialog.

Disconnect the admin console when finished.
### 6.4.2 Setting database paths

Since Columbus 7.5, the paths to the databases are saved in the main Columbus DB. Adapt these Paths according the new server.

Do the following steps for all 3 databases (Audit, Columbus & EndPoint) using the following pattern for the server name (%SQL-Server\%SQL-Instance:%DB) and reset the user and database credentials.

Save the settings with “Save” on each database.
6.4.3 Update license server (OTB Move)

Adapt the license URL according to the new server.
6.4.4 Update the connection settings

To have the Columbus Infrastructure working correctly, the new DB settings have to be applied onto the new server.

Therefore, use the Option Save DB Settings to selected OTB servers registry to write the new settings to the selected server. Provide credentials if needed to access the remote registry.

**Note**

If the desired server isn’t available in the list of the servers, the values may be applied manually to the servers registry.

Disconnect the admin console
6.4.5 Update Central Task Manager (OTB Move)

Update the Central Task Manager Settings (Master OTB) when the infrastructure Service has been moved to the new server as well.

- Start the Columbus Infrastructure Service
- The infrastructure service will register himself as a new server. Wait until the following lines appear in the logfiles (C:\Windows\Brainware.log)
  
- Stop the Infrastructure service immediately after the registration.
- Run the AdminConsole again.
- Connect as user ColumbusRW
- On the tab OTB settings, select your new server and set the settings for the OTB Port (default 24784) and set the option Central Task Manager
- Click on Save to apply the new settings

- Disconnect the AdminConsole
- Start the Infrastructure service