

## PRIMERGY Management ServerView® Deployment Manager V5.0

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### Automated Remote Mass Deployment for PRIMERGY servers

ServerView® Deployment Manager enables to multiply a server installation to single servers or groups of servers. Automated and time controlled parallel mass remote cloning and mass remote installation on a group of server out of the ServerView data base is supported under control of a remote management station. Centrally kept boot images are used provided in a dedicated data base. An automated personalizing process allows each server instance to be put into operation quickly.

The Deployment Manager is a supplement to the standard PRIMERGY remote server installation and configuration product ServerView Installation Manager. This software is used also for remote configuration and installation of master servers.

As part of the PRIMERGY ServerView Suite Deployment Manager is integrated in the user interface of ServerView Operations Manager. The Deployment Manager provides a central overview on installed or additionally available servers, existing master images and assignment of servers to deployment groups.



### Deployment Manager Benefits

Deployment Manager performs server start-up and administration of PRIMERGY servers. It uses PXE Boot for installation and replication.

The necessary parameters are predefined at a central management station.

Image generation is done without changing the reference server which can be used productively without restrictions.

Deployment Manager installs bare metal servers using system preparation tools.

A job API supporting Apache and ISS HTTPS-Service with standard SOAP protocol allows integration to other environments.

#### Applications:

- Automated mass deployment for large server farms
- Put single servers or groups of servers into operation quickly, using remote mass installation and remote mass cloning
- Best Data center operation: Flexible assigning of server groups to tasks
- Automated execution of scripts following cloning, e.g. for driver or software updates, configuration of operating system or installation of applications.

Main features	Customer's Benefits
■ Updates using predefined scripts	■ Reduced service costs
■ Very fast updating	■ Better availability of server farm
■ Web based operation via LAN	■ Centralized remote administration
■ HTTPS secured transmission and user concept	■ Secured against unauthorized use
■ Check of clone image for compatibility	■ Preventing configuration and installation errors
■ Image distribution via unicast and multicast	■ Low network load
■ Automated and time-controlled installation	■ No time restrictions for large server farms
■ Comfortable configuration and installation via Wizards	■ Lower operational costs of server administration
■ Supports Linux, Windows and VMware ESX server operating systems for installation and cloning	■ All central platforms

## Functions

### Hardware preparation of the reference system

The hardware configuration of a target system is analyzed through the direct link of the PRIMERGY installation tool ServerView Installation Manager (ServerStart). Configuration parameters, for example for RAID groups, are set over the network. The PXE protocol is used to start remote configuration tools for unattended remote installation.

BMC / Management Blade functionality is used for remote configuration of PXE boot and power off / power down.

### Installation of a reference system

The Deployment Manager installs an executable operating system over the network on a reference system (master server), using the Installation Manager (ServerStart) functionality. Configuration and installation parameters stored in a configuration file are absorbed from a repository. Following installation of the operating system, additional application programs can also be installed over the network.

### Deployment Manager hard disk image handling

In order to generate an image, a software is booted with the aid of PXE, which reads the target system and stores the reference installation as a master image on an assigned file server in the network. In addition, a configuration and a documentation file are created. Explanatory information and specific options for the generation process can be stored for an image. The status of the image generation process is displayed.

The Deployment Manager generates and administers the hard disk images of master installations, assigns servers to a specific master image and performs time-controlled deployment processes (image generation/cloning), including regularly scheduled processes, for example every day or month.

After cloning the boot images, user defined scripts can be executed, which is useful for mass deployment.

Deployment Manager offers a physical view of the available servers for generating master images or cloning, as well as a deployment view in which servers are combined into logical groups (deployment groups) for loading with a hard disk image. Names can be freely assigned.

### Deployment Manager product structure, Licensing and order numbers

ServerView Deployment Manager consists of the deployment software on CD-ROM and software licenses. A license is required for every server for which Deployment Manager will be used for installation, image creation or cloning. For installation a license key is needed which is delivered with the Software CD (license ordering is mandatory).

The order numbers are:

U15000-C299	ServerView Deployment Manager V5.0 Software CD full version, none License.
U15000-C300	ServerView Deployment Manager 5.0 Single License. Single License for one single client server (managed node) operation – none software.
U15000-C301	ServerView Deployment Manager 5.0 Single Upgrade License License for upgrade an existing Remote Deploy V4.0 license to ServerView Deployment Manager V5.0

If required updates, patches and fixes for Deployment Manager V5.0 (Remote Deploy V4.0) can be downloaded from the support pages of [www.fujitsu-siemens.com](http://www.fujitsu-siemens.com).

## Supported PRIMERGY Systems

Deployment Manager V5.0 supports the following PRIMERGY servers as cloning for target system:

Blade Server:

- o BX300 CPU Blades M/DP
- o BX620 (S1 up to S4)
- o BX630 (2-way, 4-way and 8-way), BX630 S2
- o BX660

Rack Server:

- o RX100 (S1 up to S5)
- o RX200 (S1 up to S4)
- o RX220
- o RX300 (S1 up to S4)
- o RX330
- o RX600 (S2 up to S4)
- o RX800 S2, RX800 S3

Tower Server:

- o TX120
- o TX 150 (S1 up to S6)
- o TX200 (S1 up to S4)
- o TX300 (S1 up to S4)
- o TX600 S2, TX600 S3

Economy Server:

- o Econel 40 and 50
- o Econel 100 S2
- o Econel 200 S2
- o Econel 230R

## Supported Operating Systems for Imaging/Cloning

Deployment Manager V5.0 supports the following Operating Systems for image creation and cloning:

Blade Server:

- o MS Windows 2000 Server
- o MS Windows 2000 Advanced Server
- o MS Windows Server 2003
- o MS Windows Server 2003 SP1
- o MS Windows Server 2003 SP1 x64
- o MS Windows Server 2003 R2
- o MS Windows Server 2003 R2 x64
- o MS Windows Server 2008
- o MS Windows Server 2008 x64
- o Linux Red Hat Advanced Server 3.0
- o Linux Red Hat Advanced Server 4.0 (32 and 64 bit on EM64T)
- o Linux Red Hat Advanced Server 5.0 (32 and 64 bit on EM64T)
- o SuSE Linux United (with SLES8)
- o SLES 9 (32 and 64 bit on EM64T)
- o SLES 10 (32 and 64 bit on EM64T)
- o ESX 2.5 (based on customer script!)
- o ESX 3.00 and 3.01

In addition it is possible to generate OS independent backup images, which can be restored to a PRIMERGY server

## Supported Operating Systems for installation

Remote Mass Installation is done via Installation Manager capabilities. Therefore all Operating Systems are supported which are supported by used ServerStart / Installation Manager version. For actual details please refer to the 'What's New' file of Installation Manager menu:

<http://download.fujitsu-siemens.com/server/serverstart/en/WhatsNew.htm>

## User requirements for Deployment Manager

System administration knowledge is required for the used operating systems. The user interface is English.

## Technical requirements

### Network configuration

- PRIMERGY target server and deployment server in the same network segment
- Network with multicast and PXE functions, (alternatively Unicast Deployment possible)
- DHCP service is reachable in PXE segment

### Deployment Manager Management Station

The deployment manager server is running at the management station and provides the Web based GUI and the deployment engine

#### Minimal Hardware requirements:

PRIMERGY server with:

- Processor: Intel Xeon 1.5 GHz
- RAM: 1GB RAM
- LAN: 100 Mbit/sec
- Disk: 50 MB free space for installation
- Graphic: SVGA, resolution > 800 x 600 (1024 x 768 recommended)

#### Installation released for Operating Systems:

- MS Windows Server 2003<sup>\*</sup>
- MS Windows Server 2003 SP1<sup>\*</sup>
- MS Windows Server 2003 SP1 x64<sup>\*</sup>
- MS Windows Server 2003 R2<sup>\*</sup>
- MS Windows Server 2003 R2 x64<sup>\*</sup>
- MS Windows Server 2008<sup>\*</sup>
- MS Windows Server 2008 x64<sup>\*</sup>

<sup>\*</sup> The server may also be the domain controller

#### Installed Software (on Deployment Manager platform):

- Management software ServerView, version 4.20
  - Web-Server:
    - Apache Web-Server
    - IIS V5.1 (MS Internet Information Server) or higher (at Windows 2000)
    - MS IIS V6.0 (at Windows Server 2003)
  - Java Runtime Environment (JRE) since V1.5.0.08
  - ServerStart / ServerView Installation Manager (optional for full functionality) since version 6.712.
- Attention: The installation of Windows Server 2008 needs at least ServerStart V7.804

### Deployment Manager Deployment Server

The deployment server (the cloning module) contains the deployment services (incl. PXE and TFTP service) and needs not to be installed at the management station but must be reachable.

Hardware requirements: see those of Management Station

#### Released Operating Systems:

See those of Management Station

#### Mandatory Installed Software:

- DHCP service if none is already present in the LAN segment.
- PXE service (as contained in Deployment Manager CD or ServerStart DVD)

### Management Console for Deployment Manager

You may connect to the Deployment Manager manager via Web using the Web UI frontend.

For this connection the following requirements for hardware and software are valid:

- Computer with LAN and HTTP access
- Web Browsers MS Explorer version 5.5 or higher or Mozilla Browser version 1.3 or higher. (Support of HTML V3.2 and JavaScript V1.1 required)

### Target server

#### System and OS requirements:

- Access to LAN / HTTP
- 15 MB free disk space for installing
- Image supporting target Operation System (as listed in 'Supported Deployment Operating Systems' table above.

#### ServerView Agents:

The target server needs to run the ServerView agents which supports ServerView with system information. This ServerView data base is used by the management service of Deployment Manager. The following versions are required:

- Windows: V4.11.04 or higher
- Linux: V4.11.10 or higher
- ESX: V4.31.08 or higher (ESX 3.0 support)

### Note

This document may include technical inaccuracies or typographical errors. Changes to the information will be incorporated in new editions of the document.

This document addresses the ServerView Deployment Manager software product. The software and/or the available documentation may contain the previous product name RemoteDeploy for organizational reasons.