



IBM Software Group

# IBM WebSphere eXtreme Scale V7.0

## *Installation*



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This presentation will discuss installation options for WebSphere® eXtreme Scale V7.0.

## Agenda

- eXtreme Scale stand-alone installation
- eXtreme Scale installation in a WebSphere Application Server Network Deployment environment
- Silent installation



This presentation will discuss WebSphere eXtreme Scale V7.0 installation as a stand-alone product and in a WebSphere Application Server Network Deployment environment, covering both graphical and silent installation options.



## Stand-alone installation - prerequisites

- To install WebSphere eXtreme Scale V7.0, you need:
  - ▶ Prerequisites
    - Supported operating system environment
    - eXtreme Scale installation media
  - ▶ Post-requisites
    - Java™ Development Kit (JDK)

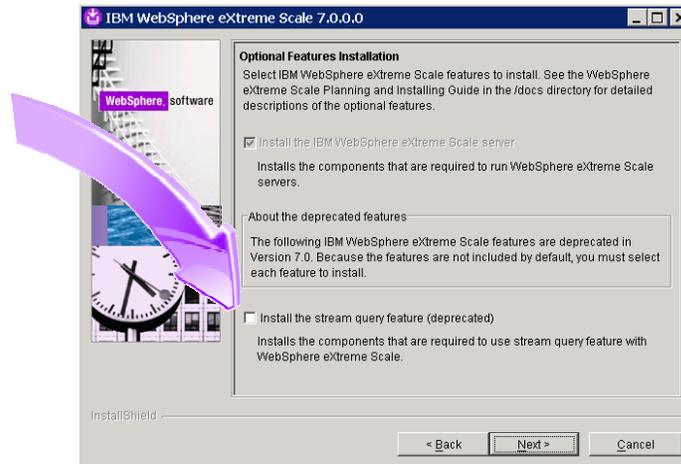


To install WebSphere eXtreme Scale V7.0, you must have a supported operating system environment and the eXtreme Scale V7.0 installation media. WebSphere eXtreme Scale V7.0 supports most of the same operating systems supported by WebSphere Application Server Network Deployment V6.0.2, V6.1.0 and V7. The WebSphere eXtreme Scale V7.0 information center has more information about the specific operating system platforms that are supported.

After the installation, you must provide a supported Java development kit for use with the WebSphere eXtreme Scale V7.0 runtime.

## Stand-alone installation - optional features

- Stream query is deprecated but optionally available during stand-alone installation



The graphical installation for a stand-alone eXtreme Scale grid installs libraries and binaries for both the server and client. The stream query feature is deprecated in eXtreme Scale V7.0 and is not installed by default. If you require the stream query feature, select “Install the stream query feature” in the installation dialogues. The stream query feature is also available as an option during silent installation.

## Stand-alone - post-requisite - provide a JDK

- Does not include Java Development Kit
  - ▶ You must provide one
  - ▶ Requires JDK V1.4.2 or newer
  - ▶ Non-IBM JDK requires several extensions
    - Details included in information center



WebSphere eXtreme Scale V7.0 provides a Java runtime environment for the installation and uninstallation of the product but does not supply a Java development kit (JDK) for use with the product itself. You can use the IBM-supplied JDK from a WebSphere Application Server installation, or you can install a JDK of your choice. The JDK level must be version 1.4.2 or newer. A non-IBM JDK must be modified to contain a suitable ORB and Xerces parser so that it is compatible with eXtreme Scale V7.0. To modify the non-IBM JDK, follow instructions in the WebSphere eXtreme Scale V7.0 information center.

## Post-install step - JAVA\_HOME environmental variable

- Add JAVA\_HOME variable to **setupCmdLine.sh/bat**



```
*setupCmdLine.sh x
#!/bin/sh

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PLATFORM=`bin/uname`

CUR_DIR=`pwd`
OBJECTGRID_DIR=`dirname ${0}`/..
cd "${OBJECTGRID_DIR}"
OBJECTGRID_HOME=`pwd`
cd "${CUR_DIR}"
# Comment out below line to not use the ORB shipped in the lib endorsed directory
OBJECTGRID_ENDORSED_DIRS="${OBJECTGRID_HOME}/lib/endorsed

#Line added below: Set JAVA_HOME environmental variable to point to JDK installation
JAVA_HOME=/usr/java/default

# Uncomment out below line to use WebSphere Real Time Java
#WXS_REAL_TIME_JAVA="-Xrealttime -Xgcpolicy:metronome -Xgc:targetUtilization=80 "

case $PLATFORM in
    SunOS)
        if [ "$JAVA_HOME" = "" ]
        then
```

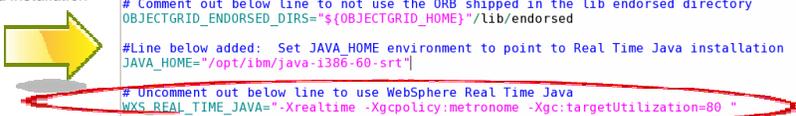


After installing or determining the installation location of an appropriate JDK, you can modify the setupCmdLine batch or shell file within the eXtreme Scale V7.0 binary directory to specify the JAVA\_HOME environmental variable for the JDK. Alternatively, you can use your own login customization or shell script to establish the JAVA\_HOME environmental variable before using eXtreme Scale V7.0.

## Post-install step – Real Time Java

- Modify **setupCmdLine.sh** to uncomment the line that sets the WXS\_REAL\_TIME\_JAVA variable

Note: JAVA\_HOME is set to point to Real Time Java installation



```

*setupCmdLine.sh x
#!/bin/sh

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PLATFORM=`/bin/uname`

CUR_DIR=`pwd`
OBJECTGRID_DIR=`dirname ${0}`/..
cd "${OBJECTGRID_DIR}"
OBJECTGRID_HOME=`pwd`
cd "${CUR_DIR}"
# Comment out below line to not use the ORB shipped in the lib endorsed directory
OBJECTGRID_ENDORSED_DIRS="${OBJECTGRID_HOME}/lib/endorsed

#Line below added: Set JAVA_HOME environment to point to Real Time Java installation
JAVA_HOME="/opt/ibm/java-1386-60-srt"

# Uncomment out below line to use WebSphere Real Time Java
WXS_REAL_TIME_JAVA="-Xrealttime -Xgcpolicy:metronome -Xgc:targetUtilization=80 "

case $PLATFORM in
SunOS)
    if [ "$JAVA_HOME" = "" ]
    then

```

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For Linux® platforms, you have the option of using WebSphere real time as your Java software development kit. If you do, you must modify the command line setups script (*setupCmdLine.sh*) in the WebSphere eXtreme Scale V7.0 binary directory so that the environmental variable WXS\_REAL\_TIME\_JAVA is defined, as shown in the slide. As noted on the previous slide you can also modify this script to specify the JAVA\_HOME environmental variable to point to your WebSphere real time installation.

## Section

# ***WebSphere eXtreme Scale installation in a WebSphere Application Server environment***



This section will provide an overview of the installation of WebSphere eXtreme Scale V7.0 in a WebSphere Application Server Network Deployment environment.

## WebSphere Network Deployment environment

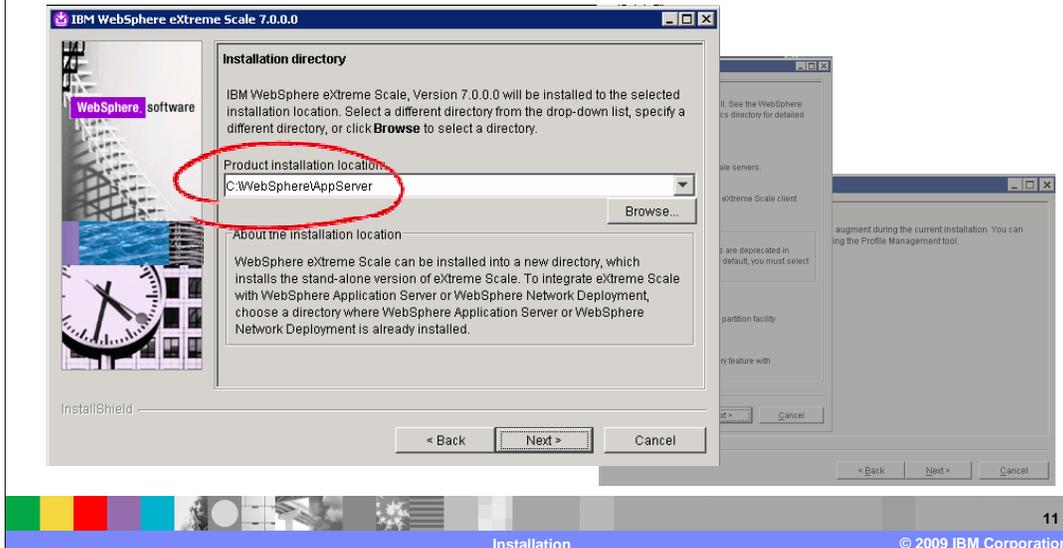
- To install eXtreme Scale V7.0, you need:
  - ▶ Supported environment
    - WebSphere Application Server Network Deployment environment must be
      - 6.0.2 +
      - 6.1.0 +
      - 7.0 +
  - ▶ eXtreme Scale installation media



WebSphere eXtreme Scale will install on most operating system platforms that are supported by WebSphere Application Server Network Deployment V6 or V7. However, WebSphere eXtreme Scale V7 does require specific minimum maintenance levels for WebSphere Application Server Network Deployment. See the WebSphere eXtreme Scale V7.0 information center for details on which fix packs are required.

## WebSphere environment installation - location

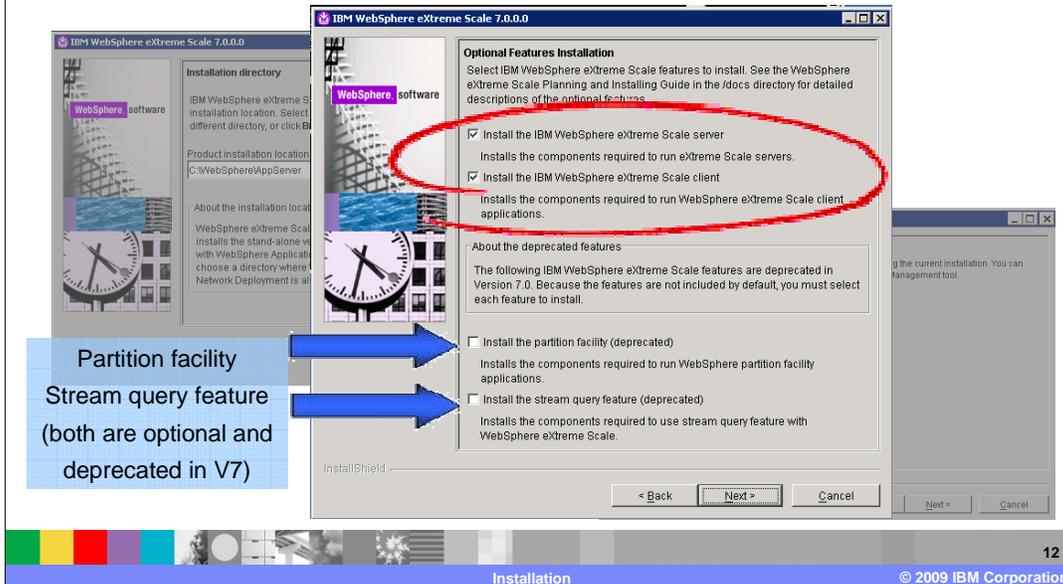
- Supply the WebSphere Application Server installation location and select the profiles to augment



During the WebSphere eXtreme Scale installation, you can specify a WebSphere Application Server Network Deployment installation directory as the target installation location. The installation process will ensure that WebSphere is installed in the specified location and that required maintenance has been applied.

## WebSphere environment installation - optional features

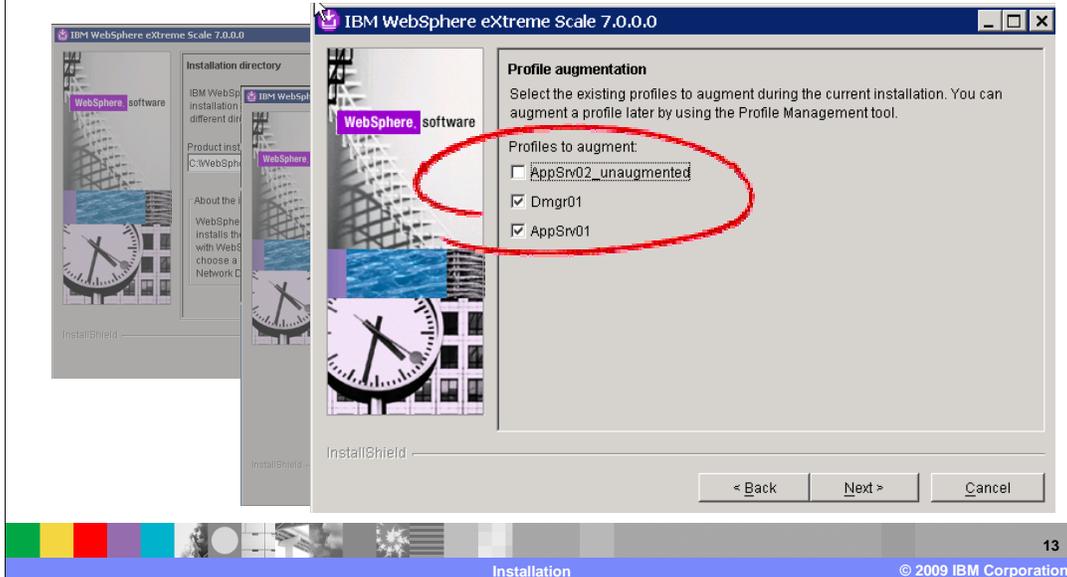
- Select the server and client, or client alone



You can choose to install just the eXtreme Scale client, or the client and server, by checking the appropriate boxes. The client is required when you select the server installation. In addition, you can optionally install the partition facility and the stream query feature, both deprecated in V7.0, by checking the appropriate boxes.

## WebSphere environment installation - profile augmentation

- Select the profiles you want to be augmented



The installer will list and automatically select all profiles that it finds in the WebSphere installation. A profile must be augmented for WebSphere eXtreme Scale to host an eXtreme Scale server or catalog server. Deselect any profiles that you do not want to be augmented for WebSphere eXtreme Scale.

## Section

# *Silent installation*



This section will provide an overview of the WebSphere eXtreme Scale V7.0 silent installation process.

## Silent installation

- Install the product without the graphical interface
  - ▶ Allows scripted installations
  - ▶ Takes less installation time compared to the graphical interface
  - ▶ Allows non-technical staff to run installations if technical staff provides the response file
  - ▶ Provides same installation capabilities as the graphical interface



The silent installation option allows you to install the product without using the graphical interface and without requiring you to interactively reply to installation messages. This allows scripted installations of the product. This technique normally runs faster than the graphical installation. Silent installation allows non-technical staff to install the product if an appropriate response file is supplied. All installation options available through the graphical interface are also available for a silent installation.

## Silent installation

- Customize the response file

- Invoke it

`Install.bat -options "D:\installImage\WXS\wxssetup.response" -silent`



- Installation logs

- Stand-alone installation: <XS\_installation\_root>/logs/wxs/install
- WebSphere environment installation: <WAS\_installation\_root>/logs/wxs/install



To prepare for a silent installation, customize the `wxssetup.response` file included on the installation media. You can rename this file if you prefer. Then invoke the installation with the installation script, supplying the “-options” parameter which points to the response file, and the “-silent” parameter. The format of the installation command for “silent” installation is shown on this slide. You can review the `wxssetup.response` file provided on the installation media to see how you can customize the various options. The license acceptance statement must be set to “true” for any silent installation invocation, since the value supplied in the prototype file is “false”. You must also set the “install location” parameter within the response file. An installation log is produced under the installation directory as shown.

## Section

# *Summary*

The next section will provide a summary of this presentation.

## Summary

- eXtreme Scale stand-alone installation
- eXtreme Scale installation with WebSphere Network Deployment
- Silent installation



This presentation provided an overview of a WebSphere eXtreme Scale stand-alone installation, an eXtreme Scale installation in a WebSphere environment, and an installation of eXtreme Scale V7 using the silent installation technique.

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