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**Nokia UltraSite EDGE BTS, Rel. CX5, Product
Documentation, v.1**

Installing and Upgrading UltraSite EDGE BTS Software



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Summary of changes in Installing and Upgrading UltraSite EDGE BTS Software

The following changes have taken place in the *Installing and Upgrading UltraSite EDGE BTS Software* document:

- Information updated to CX5 level

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General information

This document describes how to install Nokia MetroSite EDGE Base Station, Nokia InSite Base Station, or Nokia UltraSite EDGE Base Station Software (BTS SW) at the Base Station Controller (BSC) and Nokia NetAct.

- Chapter *Installing the BTS SW package at the BSC* describes the BTS SW installation and managing at the BSC with MML commands.

Follow the instructions given in this chapter by proceeding section by section unless otherwise instructed.

- Chapter *BTS SW installation with NetAct* describes the BTS SW installation with the following NetAct versions: OSS3.1 ED3, OSS4 and OSS4.1.

Follow the instructions given in this chapter by proceeding section by section unless otherwise instructed.

- Chapter *Downloading new BTS SW* describes how to download the new BTS SW onto the old SW.



Note

All the file names and the file extensions given in this document serve as examples only. For the correct BTS SW file names and file extensions, refer to the *Release Note* in BTS SW release documentation.



Note

At the Base Station Controller (BSC), Base Transceiver Stations (BTSSs) are seen as BCFs and sectors as BTSSs. This principle is followed in this document.

**Note**

The MML commands are presented in `Courier` font. The user-definable parts in the MML commands are presented in ***Bold and Italics***.

Summary of changes between CX(M)5 and CX(M)4.1

Instructions in chapter *BTS SW installation with NetAct* have been modified as follows:

- For Nokia NetAct releases OSS3.1 ED3 and OSS4: existing instructions for BTS SW installation with Network Element Software Configuration Manager have been retained. For details, see section *Installing BTS SW with OSS3.1 ED3 and OSS4*.
- For Nokia NetAct release OSS4.1: instructions for BTS SW installation with the Software Manager application have been added. For details, see section *Installing BTS SW with OSS4.1*.

For more information on the compatibility between different CX(M) SW and NetAct SW versions, see *Software compatibility of UltraSite EDGE BTS* and *Software compatibility of MetroSite EDGE BTS* in BTS SW release documentation.

3

Installing the BTS SW package at the BSC

3.1 Starting MML session at the BSC

Purpose

To start an MML session at the BSC, follow the procedure below.



Steps

1. Enter username: *<Username>*.
2. Enter password: *<Password>*.

3.2 Checking existing BTS SW

Purpose

To check the existing BTS SW, follow the procedure below.



Steps

1. List the existing BTS SW packages and their locations with MML command:

ZEWL;

2. Select the first /BCF_PACK/PACK_X_-directory that is not listed.

Remember that the BTS SW is going to be located there.

**Note**

Pack_X is a sub-directory in the /BCF_PACK directory. In this document, ***PACK_1*** is used as an example directory.

3. **Verify that *PACK_1* is really empty with MML command:**

```
ZIWX::WS,NODEF:BCF_PACK,PACK_1:%,%,;
```

If no files are listed when this command is given, the directory ***PACK_1*** can be used. Otherwise, the files listed must be deleted or another directory must be chosen.

4. **If there are too many files in the directory, delete the excess files with MML command:**

```
ZIWD::WS,NODEF:BCF_PACK,PACK_1:file_name,  
file_extension,;
```

where *file_name* is the name of the file you are deleting and *file_extension* is the extension of that file.

5. **For deleting both source and backup files, give MML command:**

```
ZIWD::WSB,NODEF:BCF_PACK,PACK_1:file_name,  
file_extension;
```

**Note**

Files can only be deleted as long as there are no BCFs that are attached to the package.

3.3 Copying the BTS SW from diskettes to the BSC hard disks

Purpose

To copy the BTS SW from diskettes to the BSC hard disks, follow the procedure below.



Steps

1. **Define the directory where the BTS SW files are copied from and the source drive with MML command:**

```
ZIWI:S:SYSTEM=<bsc>,UNIT=OMU,PATH=/,DRIVE=FDU-N0;
```

In this case it is assumed that the BTS SW is in the root directory of the delivery diskette.

2. **Define the destination drive (hard disk of the BSC) and the destination directory where the BTS SW files are copied to with MML command:**

```
ZIWI:D:SYSTEM=<bsc>,UNIT=OMU,PATH=/BCF_PACK/PACK_1,  
DRIVE=WDU-SB;
```

3. **Copy the BTS SW with MML command:**

```
ZIBC;
```

3.4 Updating new information to the PACK_INFO.TXT

Purpose

This command is optional, but if `pack_info.txt` (or under some other name) is kept up-to-date at the BSC, the command can also be used to check the location of the BTS SW packages.

To update new information to the `PACK_INFO.TXT`, follow the procedure below.



Steps

1. **Open the editor.**
2. **Update the information with MML command:**

```
ZIEE:WSB,NODEF:BCF_PACK:PACK_INFO, TXT, : ; 0
```

3. **Quit the editor.**

Press CTRL+C.

3.5 Creating the BTS SW



Steps

1. To create the BTS SW that was just copied in Section *Copying the BTS SW from diskettes to the BSC hard disks*, give MML command:

```
ZEWC:BTSSWxxxx:MF=BTS_S302,EXT=2E1,SDIR=PACK_1;
```

The elements in this MML command stand for the following:

- **BTSSWxxxx** is the name you give to the BTS SW.
- **BTS_S302** (or equivalent) is the name of the master file on the diskette.
- **2E1** (or equivalent) is the extension part of the master file name on the diskette.
- **PACK_1** is the sub-directory that the package was copied to in Section *Copying the BTS SW from diskettes to the BSC hard disks*.

Further information



Note

The content of the BTS SW can also be checked with MML command:

```
ZEWP:ID=<bts_SW_name>;
```



Note

For the correct BTS SW file names, refer to the *Release Note*.

3.6 Modifying the status of the old BTS SW

Purpose

To modify the status of the old BTS SW, follow the procedure below.

Before you start

There can be up to two BTS SW packages attached to the BCF non-volatile memory. The BTS SW packages are identified with the states 'New', 'Fallback' and 'Backup'. The BTS SW that is activated (see Section *Activating the BTS SW*) is the default BTS SW that is downloaded to the BCF after a BCF restart.

Nokia recommend that the following BTS SW statuses are used:

- Status 'New' should contain no BTS SW
- Status 'Backup' should contain the default BTS SW
- Status 'Fallback' should contain another BTS SW if one exists.

If this is already the case, proceed straight to Section *Deploying the BTS SW to the BCF*. If not, proceed as follows.



Steps

1. To display the BTS SW packages that are attached to the BCF, give MML command:

```
ZEWO : <bcf_number>;
```

(<bcf_number>; is the site-specific BCF number.)

2. Interchange the states of the Backup (*BU*) and New (*NW*) BTS SW with MML command:

```
ZEWH : <bcf_number>;ST1=BU, ST2=NW,
```

The old BTS SW is now in the status 'Backup' as a default package.

3. Detach the BTS SW from the status 'New' and release this position for the new BTS SW with MML command:

```
ZEWE : <bcf_number>;NW;
```

4. Status 'New' can now be used.

3.7 Deploying the BTS SW to the BCF

Before you start

When deploying the BTS SW to the BCF, the BCF must be operational. The BTS SW is downloaded as background operation.



Steps

1. If the BCF is operational, start BTS SW background downloading with MML command:

```
ZEWA: <bcf_number>:NW:BTSSWxxxx;
```



Note

When initially changing from GSM to EDGE capable BTS SW, the SW must be downloaded twice.

Expected outcome

After BTS SW downloading, the BSC gives an automatic command to store the BTS SW in the non-volatile memory of the base station.

BTSSWxxxx is now one of the three BCF-specific BTS SW packages.



Note

Allow some time for the BTS SW to be saved in the non-volatile memory before giving the activation command. You can see when this procedure is completed when monitoring the BTS SW downloading procedure.

Unexpected outcome

If the BCF is in reset, the BTS SW background downloading cannot take place.



Note

If the BCF is in reset, or if it is reset before the new BTS SW is activated (see Section *Activating the BTS SW*), the old BTS SW is downloaded since it is still the default BTS SW.

3.8 Activating the BTS SW



Steps

1. **Activate the BTS SW with MML command:**

```
ZEWV:<bcf_number>:NW;
```

Expected outcome

The new BTS SW is now the default BTS SW with the status 'New' (**NW**) at the BSC.

The BCF is reset and initialised with the new BTS SW.

Further information

You can also monitor the activation process between the BSC and the BCF. See Section *Monitoring the BTS SW downloading and activation*.



Note

If needed, you can always fall back from the new BTS SW to the old BTS SW.



Note

Once a BTS SW containing EDGE files is downloaded and activated, you cannot go back to a GSM BTS SW and then to a newer EDGE BTS SW. The older BTS SW containing the EDGE files must be activated first before activating the newer EDGE BTS SW.

3.9 Rearranging BTS SW

Purpose

To rearrange the BTS SW, follow the procedure below.

**Note**

The content of the BTS SW can also be checked with MML command:

```
ZERP:ID=<bts_SW_name>;
```

To rearrange the BTS SW packages, Nokia recommend that the following procedure is followed.

**Steps**

1. **Swap the BTS SW packages that are in Backup and Fallback status with MML command:**

```
ZEPH:<bcf_number>;ST1=BU,ST2=FB;
```

2. **Swap the BTS SW packages that are in Backup and New status with MML command:**

```
ZEPH:<bcf_number>;ST1=BU,ST2=NW;
```

Now the default BTS SW is in the status 'Backup'.

3. **Detach the BTS SW in the status 'New' with MML command:**

```
ZEPH:<bcf_number>;NW;
```

4. **Display the BTS SW packages that are attached to the BCF with MML command:**

```
ZEPH:<bcf_number>;
```

Expected outcome

The screen should now look like in the figure below:


```
BCF-046      NW
METROSITE    BU  CXM3_3_A51  3.73-19  /PACK_9  DEFAULT
              FB  CXM3_3_A52  3.72-19  /PACK_7
```

Figure 1. BTS SW displayed

Further information

The alternative to using the BSC commands is to use the roll SW utility that is available at the Nokia NMS.

3.10 Monitoring the BTS SW downloading and activation

Purpose

To monitor the BTS SW downloading and activation, follow the procedure below.



Steps

1. **Start a remote service terminal session from the BSC to the BCF with MML command:**

```
ZDDS;
```

2. **Create a service terminal application if it does not exist already, and enable it with MML command:**

```
00-MAN> ZLE:X,RPHASESX.IMG
```

```
00-MAN> X
```

3. **Monitor the BCF with MML command:**

```
00-RPH> DC:<bcf_number>
```

**Note**

If you need to exit the remote service terminal session, press `Ctrl + C` to exit monitoring the BCF and type `ZE` to exit the remote service terminal session.

The elements in the MML command in Step 3. stand for the following:

- D stands for monitoring
- C stands for continuously
- `<bcf_number>` is the site-specific BCF number

Expected outcome

When monitoring the BTS SW background downloading from the BSC to the BCF, the screen should look like in the figure below.

**Note**

The number of files as well as the file names and file extensions shown in the figures below serve only as examples. For the correct file names and file extensions, refer to the *Release Note*.

BCF	TRX	OPERATION	PHASE	FILE	STAT	TIME
010		SITE RESET	OPERAT COMPLETED	.....	00000	13:27:23
010		BACKGRD DL	DOWNLOAD STARTED	.....	00000	13:30:31
010		BACKGRD DL	DOWNLOADING MF	BTS_S302.2E1	00000	13:30:31
010		BACKGRD DL	DOWNLOADING AF	VB0_S302.1A7	00000	13:30:32
010		BACKGRD DL	DOWNLOADING AF	VTG_S302.2D1	00000	13:33:51
010		BACKGRD DL	DOWNLOADING AF	CDI_S302.2D3	00000	13:34:07
010		BACKGRD DL	DOWNLOADING AF	CDE_S302.2D4	00000	13:34:10
010		BACKGRD DL	DOWNLOADING AF	EQD_S302.1A5	00000	13:34:12
010		BACKGRD DL	DOWNLOADING AF	CFG_S302.1A6	00000	13:34:21
010		BACKGRD DL	DL COMPLETED	.....	00000	13:34:39
010		BACKGRD DL	SW SAVE STARTED	.....	00000	13:34:40
010		BACKGRD DL	SW SAVE COMPLETED	.....	00000	13:34:42
010		BACKGRD DL	OPERAT COMPLETED	.....	00000	13:34:43
█						
			ROLL	CAPS NUML		013 004

Figure 2. Monitoring BTS SW background downloading from the BSC to the BCF

When monitoring the BTS SW activation process between the BSC and the BCF with BTS SW background downloading, the screen should look like in the figure below.

BCF	TRX	OPERATION	PHASE	FILE	STAT	TIME
010		SITE RESET	OPERAT COMPLETED	.....	00000	13:10:59
010		SITE RESET	RESET REQ SENT	.....	00000	13:27:00
010		SITE RESET	BTS OMU STARTED	.....	00000	13:27:17
010		SITE RESET	DOWNLOAD STARTED	.....	00000	13:27:17
010		SITE RESET	PACKAGE IN FLASH	.....	00000	13:27:18
010		SITE RESET	DL COMPLETED	.....	00000	13:27:18
010		SITE RESET	CONF REQ RECEIVED	.....	00000	13:27:19
010		SITE RESET	CONF DATA SENT	.....	00000	13:27:20
010		SITE RESET	CONF COMPLETED	.....	00000	13:27:23
010		SITE RESET	OPERAT COMPLETED	.....	00000	13:27:23
■						
ROLL				CAPS NUML	013 004	

Figure 3. Monitoring the BTS SW activation process between the BSC and the BCF with BTS SW background downloading

When monitoring the BTS SW activation process between the BSC and the BCF without BTS SW background downloading the screen should look like in the figure below.

BCF	TRX	OPERATION	PHASE	FILE	STAT	TIME
010		SITE RESET	OPERAT COMPLETED	.....	00000	13:27:23
010		BACKGRD DL	DOWNLOAD STARTED	.....	00000	13:30:31
010		BACKGRD DL	DOWNLOADING MF	BTS_S302.2E1	00000	13:30:31
010		BACKGRD DL	DOWNLOADING AF	UB0_S302.1A7	00000	13:30:32
010		BACKGRD DL	DOWNLOADING AF	VTG_S302.2D1	00000	13:33:51
010		BACKGRD DL	DOWNLOADING AF	CDI_S302.2D3	00000	13:34:07
010		BACKGRD DL	DOWNLOADING AF	CDE_S302.2D4	00000	13:34:10
010		BACKGRD DL	DOWNLOADING AF	EQD_S302.1A5	00000	13:34:12
010		BACKGRD DL	DOWNLOADING AF	CFG_S302.1A6	00000	13:34:21
010		BACKGRD DL	DL COMPLETED	.....	00000	13:34:39
010		BACKGRD DL	SW SAVE STARTED	.....	00000	13:34:40
010		BACKGRD DL	SW SAVE COMPLETED	.....	00000	13:34:42
010		BACKGRD DL	OPERAT COMPLETED	.....	00000	13:34:43
■						
ROLL				CAPS NUML	013 004	

Figure 4. Monitoring the BTS SW activation process between the BSC and the BCF without BTS SW background downloading

3.11 Activating the old BTS SW



Steps

1. If, for any reason, there is a need to activate the old BTS SW version (the fallback BTS SW), give MML command:

```
ZEWV:<bcf_number>:FB
```

Expected outcome

The BTS SW activates the BCF specified in the command (<bcf_number>) with status Fallback (**FB**).

Further information

Two BTS SW packages can be stored in the non-volatile memory of the base station. The old BTS SW version can also be stored in the non-volatile memory. When the old BTS SW version is activated, no BTS SW downloading from the BSC is needed. The base station is initialised with the old BTS SW in the non-volatile memory.

3.12 Checking the created BTS SW

Purpose

To check the created BTS SW packages, follow the procedure below.



Steps

1. Check the BTS SW packages attached to the specified BCF (<bcf_number>) with MML command:

```
ZEWO:<bcf_number>;
```

2. To check the contents of the BTS SW that was created in Section *Creating the BTS SW*, give MML command:

```
ZEWP:MF=BTS_S302,EXT=2E1,SDIR=PACK_1;
```

Further information

The elements in the MML command in step 2. stand for the following:

- **BTS_S302** is the name of the master file on the diskette
- **2E1** is the extension part of the master file name on the diskette
- **PACK_1** is the sub-directory that the BTS SW was copied to in
Section *Copying the BTS SW from diskettes to the BSC hard disks*.

4

BTS SW installation with NetAct

4.1 Loading and creating the BTS SW package with Network Element Software Configuration Manager

Purpose

To load and create the BTS SW package in OSS3.1 ED3 or OSS4, follow the procedure below.

Before you start

The BCF used for BTS SW download testing is in operational use.



Steps

1. Transfer the BTS SW onto Nokia NetAct.

All importing and downloading is carried out through the **Software Archive** tab. You can import software from a DDS tape or from the Nokia NetAct directories to the software archive located in the Nokia NetAct disk. If the import is done from Nokia NetAct directories, FTP can be used to transfer the BTS SW package under a Nokia NetAct directory.

Note that importing software from a DDS tape into the software archive is possible only from the DDS drive of the server on which the application has been started.

If the software to be imported is not on a tape but on a CD, it has to be copied into the correct software archive subdirectory either by using the UNIX copy commands or by setting the CD as an import directory in the **Import Software** dialog.

**Note**

All BTS SW files should be in capital letters.

Expected outcome

The BTS SW is copied. Open a Top-Level User Interface session on the NetAct UNIX platform.

2. **Select UTILS →SOFTWARE CONFIGURATION MANAGEMENT →NE SOFTWARE CONFIGURATION.**
3. **Select the Software Archive tab.**
4. **Select the correct generation listed under BS SOFTWARE.**
5. **Click Import.**
6. **Select the correct directory by typing the path name in or by using the '...' button.**
7. **Click OK.**
8. **Select all the files that you want to import.**

(This is no longer automatically done by the BTS master file.)
9. **Click OK.**
10. **Rename the Archive directory to display the BTS SW name (for example, DF7001A51).**

Press OK.

Expected outcome

The BTS SW you imported should now appear under the BS SOFTWARE generation.

4.2 BTS SW package background downloading with Network Element Software Configuration Manager

Purpose

To background download the BTS SW package, follow the procedure below.

Before you start

For DX200 based managed objects, the downloading is performed in the following way:

- *Change delivery:* the software is downloaded to the CDTEMP directory of the default package.
- *Software package:* the software is downloaded to the main directory of the managed object.



Steps

1. **Select UTILS →SOFTWARE CONFIGURATION MANAGEMENT →NE SOFTWARE CONFIGURATION.**
2. **Select the Software Archive tab.**
3. **Select BS SOFTWARE.**
4. **Select the SW package that you want to download.**
5. **On the same page, select MANAGED OBJECTS →BCF.**
6. **Click Download.**

The Task Scheduling dialog opens.

7. **To download the SW immediately, click Immediately in the Task Scheduling dialog.**

Or

To download the SW with a set time, select **Later** in the Task Scheduling dialog.

Selecting this latter option enables the **Set Time...** button. Clicking the button opens a **Time and Date Selection** dialog, which allows you to schedule the activation for a later time.

Further information

Do not select the **Activate Software** check box.

8. Click OK.**Expected outcome**

Downloading is performed by creating the download tasks.

9. To check the status of the downloading, see Pending Tasks pane in Tasks tab.**Further information**

The status is also shown on the Monitoring tab.

Expected outcome

In NetAct, the status is ONGOING during the download, and COMPLETED when the download is finished.

4.3 BTS SW package background downloading and activation with Network Element Software Configuration Manager

Purpose

To background download and activate the BTS SW package, follow the procedure below.

**Steps****1. Activate the BTS SW package.**

For instructions, see the steps in *BTS SW package background downloading with Network Element Software Configuration Manager*.

2. In the Task Scheduling dialog, select the Activate Software check box.

If this option is selected, the software will be automatically activated after the download.

Further information

This is not possible with OSS3.1, if the package has already been downloaded to the BCF.

4.4 Loading and creating the BTS SW package with Software Manager

Purpose

Follow these instructions to load and create a BTS SW package in NetAct OSS4.1 SW Archive using the Software Manager application.

Before you start

SW Archive is a centralized place for storing SW packages. Using the **SW Archive** view, you can import new SW packages to NetAct (from DDS tape or directory). You can move the SW packages or drag-drop them between the SW package categories.

When loading and creating the BTS SW, the BCF must be operational.



Steps

1. Copy the BTS SW to HP-UX.

In order to import the BTS SW into the SW Archive, the required NE SW must be copied to the following location on the Tier 3 HP-UX server:

```
/var/opt/nokiaoss/admin/swmgmt/swtemp
```

The permission set is 777 (rwxrwxrwx) .

2. Login to NetAct Start at <https://<linas-cluster-fqdn>/netact/> with your username and password.

3. To start Software Manager, select Administration → Software Manager.

4. Select the network element type as BCF and subtype as BTS.

5. Click the SW Archive tab.

6. Select the correct BTS SW from the SW package categories.

- For UltraSite BTS SW, select *BS Software (UltraSite)*.
- For MetroSite BTS SW, select *BS Software (MetroSite)*.

7. Click Import New SW Package.

The **Import Software** dialog is displayed.

8. Select the files you want to import and provide a name for the SW package.

Give the name in capital letters.

9. Click OK.

Expected outcome

The BTS SW package is imported to NetAct with the name given.

4.5 Background downloading the BTS SW to network elements with Software Manager

Purpose

Follow these instructions to download the BTS SW to network elements.

Before you start

Start the Software Manager application from NetAct Start, if it is not already running.



Steps

1. In Software Manager, click the **Tasks** tab.
2. Select the network element type as **BCF** and subtype as **BTS**.
3. Select the parent **BSC** of the selected **BCF** displayed in the **Parent View**.
4. In the **Network Elements** table, select the **BCF** network element check box.
5. Select the **New Task** tab.

- a. Select the "download" task from the **Task Type** menu.
- b. Choose SW type as "SW" and select the correct SW package from the drop-down menu.
- c. Schedule the "download" task to be started immediately.

Or

To run the download with a schedule, click **Schedule**.

6. Click the Tasks tab.

Check that the Task status is progressing from *Waiting* to *Ongoing* and to *Completed*.

4.6 BTS SW package background downloading and activation with Software Manager

Purpose

Follow these steps to background download and activate the BTS SW package.



Steps

1. Activate the BTS SW package.

For instructions, see the steps in *Background downloading the BTS SW to network elements with Software Manager*.

2. When selecting the task type, choose "download_activate" instead of the "download" task.

5

Downloading new BTS SW

Purpose

This section describes how to download the new BTS SW onto the old SW.

Before you start



Note

You are only allowed to download the new BTS SW onto the latest released BTS SW version.



Note

BTS SW downloading cannot be performed by BTS Manager SW operating in a remote mode.



Steps

1. **To background download new BTS SW from BSC when old BTS SW is the running package, follow the procedure below.**
 - a. Attach the new SW package at the BSC.
The new SW is background downloaded to the BCF.
 - b. Activate the new SW package.
The site resets itself and downloads the new SW package to the units.
 - c. Now the BOI/master TRX has all the application files included in the new SW package, and the SW downloading to the slave TRXs can start.

Expected outcome

The site completes the normal startup procedures and begins operating with the new BTS SW.

2. To download new BTS SW directly from BSC when old BTS SW is the running package, follow the procedure below.

- a. Attach the new SW package at the BSC.
The new SW is downloaded to the BCF.
- b. Activate the new SW package.
The site resets itself and downloads the new SW package to the units.
- c. Now the BOI/master TRX has all the application files included in the new SW package, and the SW downloading to the slave TRXs can start.

Expected outcome

The site completes the normal startup procedures and begins operating with the new BTS SW.

3. To download new BTS SW directly from local BTS Manager when old BTS SW is the running package, follow the procedure below.

- a. When the BTS is in the 'Wait for LAPD' status, load the new BTS SW package with the `Replace SW` command.
After the first SW downloading is completed, the BTS resets itself.
Now the new UC application file that is capable of handling EDGE DSP application files, is in BOI/master TRX.
- b. When the BTS reaches the 'Wait for LAPD' status, load the same new BTS SW package again with the `Replace SW` command.
After the downloading, the BTS resets itself.
Now the EDGE specific application files have been downloaded to the BTS.
- c. Now the BOI/master TRX has all the application files included in the new SW package, and the SW downloading to the slave TRXs can start.

Expected outcome

The site begins operating with the new BTS software.

4. To background download new BTS SW from local BTS Manager when old BTS SW is the running package, follow the procedure below.

- a. To load the new BTS SW package, use the `Replace SW` command.
- b. After the first SW downloading is completed, reset the BTS.

Now the new UC application file that is capable of handling EDGE DSP application file is in BOI/master TRX.

- c. Load the new BTS SW package again with the `Replace SW` command.

Now the EDGE specific application files have been downloaded to the BTS.

- d. Now the BOI/master TRX has all the application files included in the new SW package, and the SW downloading to the slave TRXs can start.
- e. Reset the BTS and the site begins operating with the new BTS software.

BTS has new BTS SW running package

No matter how the new BTS SW package is loaded to the BTS, it is still performed the same way as with the previous SW releases, because the running SW can now handle EDGE specific application files. All the application files can be downloaded in one go.

5. To update with a new BTS SW version when old SW is the running package and the latest released SW package is newest in flash, follow the procedure below.

- a. Before you start downloading a new SW package to the BTS, activate the newest package in the flash again.

Now this SW is the running package at the BTS.

- b. Now it is allowed to download a new BTS SW package, for example a dash release, to the BTS.

SW downloading goes as described above.

6

Installing and upgrading UltraSite EDGE BTS commissioning software

6.1 Installing BTS Manager

Before you start

Before installing BTS Manager, check the following system requirements.

Table 1. System requirements for BTS Manager

System component	Requirement
Computer	Intel® Pentium®-compatible PC
Operating system	Microsoft® Windows™ 2000 (Service Pack 3) Microsoft® Windows™ 2000 Server Microsoft® Windows™ XP Microsoft® Windows™ 2003 Server
Processor	minimum 300 MHz (recommended 500 MHz or more)
System memory	128 MB recommended or according to installed operating system
Monitor	minimum SVGA with 800 x 600 resolution (recommended 1024 x 768 resolution)
Hard disk	10 MB free space exclusively for each Node Manager installation (recommended hard disk space 200 MB)
Local connection	9-pin serial port in the PC and LMP cable
Remote connection	Network adapter with connection to DCN
Accessories	CD-ROM drive Pointing device: mouse, trackball, touch pad or equivalent Windows-compatible printer (optional)

Summary

BTS Manager and the other related management applications are delivered on the SiteWizard CD.

Software updates are delivered via Nokia Online Services (NOLS).



Steps

1. **Start Windows.**
2. **Insert the installation CD-ROM into the CD-ROM drive.**
3. **Wait a few seconds.**

If the Setup program is not launched automatically, double-click the CD-ROM drive icon in the *My Computer* window to open the CD-ROM disk. Double-click the *Nokia SiteWizard5.msi* program icon in the window.

4. **Follow the instructions displayed in the Setup program.**

The Setup program copies the BTS Manager files. At the end of the procedure, it notifies you that the setup is complete.

6.2 Installing UltraSite BTS Hub Manager

Before you start

Before installing UltraSite BTS Hub Manager, check the following system requirements.

Table 2. System requirements for UltraSite BTS Hub Manager

System component	Requirement
Computer	Intel® Pentium®-compatible PC
Operating system	Microsoft® Windows™ 2000 (Service Pack 3) Microsoft® Windows™ 2000 Server Microsoft® Windows™ XP Microsoft® Windows™ 2003 Server
Processor	minimum 300 MHz (recommended 500 MHz or more)
System memory	128 MB recommended or according to installed operating system

Table 2. System requirements for UltraSite BTS Hub Manager (cont.)

System component	Requirement
Monitor	minimum SVGA with 800 x 600 resolution (recommended 1024 x 768 resolution)
Hard disk	10 MB free space exclusively for each Node Manager installation (recommended hard disk space 200 MB)
Local connection	9-pin serial port in the PC and LMP cable
Remote connection	Network adapter with connection to DCN
Accessories	CD-ROM drive Pointing device: mouse, trackball, touch pad or equivalent Windows-compatible printer (optional)

Summary

UltraSite BTS Hub Manager and the other related management applications are delivered on the SiteWizard CD.

Software updates are delivered via Nokia Online Services (NOLS).



Steps

1. Install General Communication Service (GCS).

SiteWizard automatically checks for the presence of GCS. If it is not found on the system, SiteWizard installs it if selected from the Program Selection window:

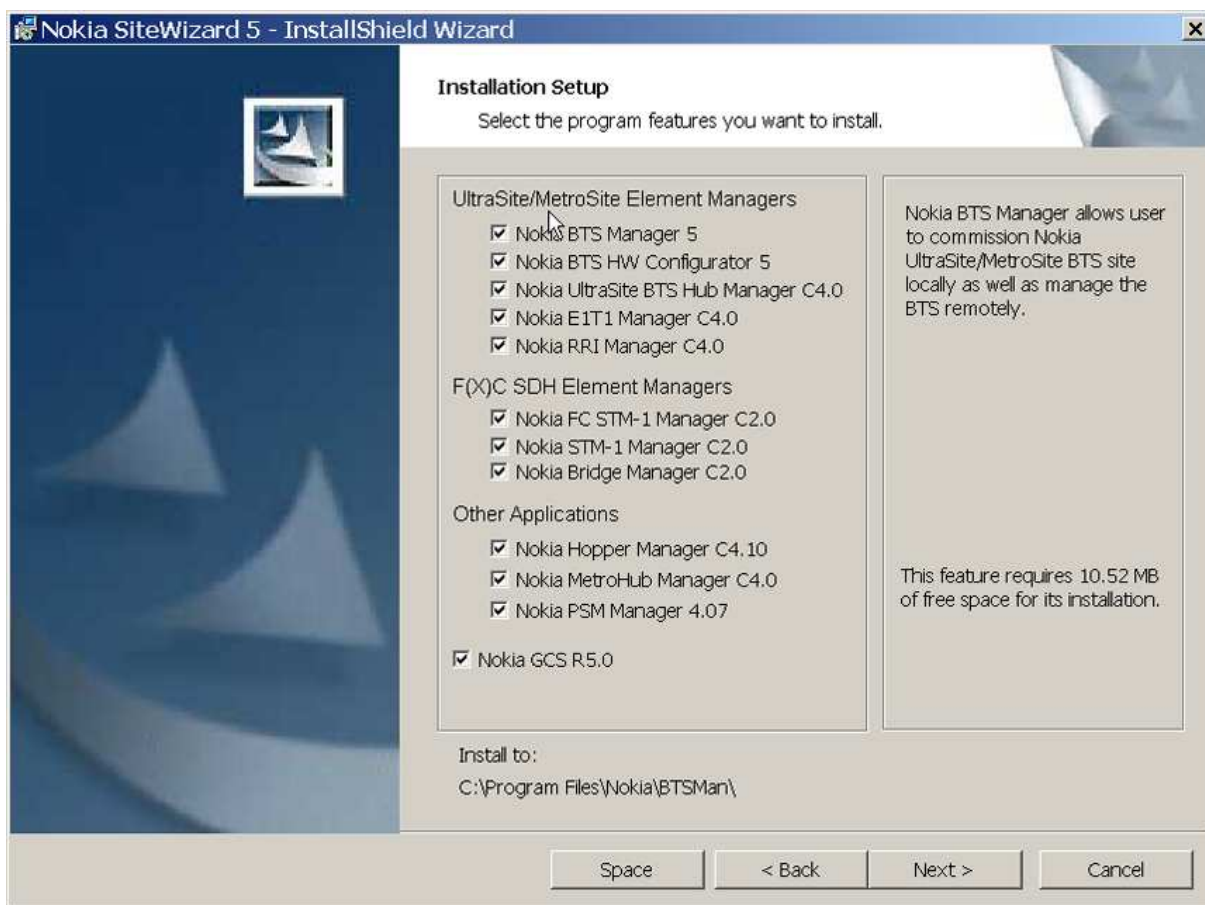


Figure 5. Program Selection window



Note

To upgrade GCS from a previous version, see the SiteWizard `Readme.txt` file or the GCS `Readme.txt` file for detailed instructions.

2. Start Setup by running `setup.exe` from your CD-ROM drive.

If AutoRun is set in your Operating System, **setup.exe** starts once the SiteWizard CD is inserted into the CD-ROM drive.

3. Follow the instructions in the installation program.

**Note**

The XML parser is automatically set by the Operating System. If you experience any problem while saving XML files from the Hub Manager, manually install the XML parser from the accessories folder on the SiteWizard installation CD. The XML parser is included on the SiteWizard installation CD at \Accessories\XML\InstallXML Win2000.exe.

6.3 Overview of upgrading the transmission node manager and transmission unit software

Before you start

ITN releases from C2.0 support remote software download.

**Note**

Upgrade from C1.2 on site via the LMP connection.

Do any necessary hardware or BTS upgrades before the software upgrade.

**Note**

Remote user access level can be restricted. If user access levels are enabled, only those remote users who have administrator rights gain full read/write access to element manager.

**Steps**

1. **Upgrade the node manager from Nokia SiteWizard to your PC or laptop as described in Installing transmission node software from Nokia SiteWizard.**
2. **Upload the node settings for a back-up.**
3. *If upgrading new transmission unit software in MetroSite BTS*

Then

Open the transmission unit manager.

4. Download the FXC transmission unit software.

If there are several FXC units using the same kind of software package in the same cabinet, download the FXC unit software to the first unit (see *Downloading FXC transmission unit software* for instructions). Then copy the software from the first unit to the other(s), as described in *Copying transmission unit software between transmission units*.

**Note**

When upgrading, activate the downloaded SW on the master FXC unit (the unit in slot 1) before copying and activating the new SW on the other FXC units.

5. Upgrade the radio outdoor unit software last, if it is required.

6.4 Installing transmission node manager software from Nokia SiteWizard

Purpose

Use Nokia SiteWizard to install Nokia node managers, communication components, and tools required to manage related Nokia equipment. Each SiteWizard CD-ROM contains a compatible set of managers.

Before you start

To avoid compatibility problems, note the following:

- Check the compatible versions of managers.
- If your PC already contains previous node manager installations, it is recommended that you uninstall them before installing the new versions from the SiteWizard CD-ROM.
- The user ID used in the installation process must have local administrator rights when the software is being installed.

**Note**

Remote user access level can be restricted. If user access levels are enabled, only those remote users who have administrator rights gain full read/write access to element manager. For instructions, see *Enabling user access level control*.

**Steps**

1. **Start Windows.**
2. **Insert the Nokia SiteWizard installation CD-ROM into the CD-ROM drive.**

Insert the Nokia SiteWizard installation CD-ROM into your PC's CD-ROM drive. The setup program should start automatically within a few seconds.

3. *If the setup program does not start automatically*
Then

Double-click the CD-ROM drive icon in the My Computer window to open the CD-ROM disk and then double-click the setup.exe program icon in the window.

4. **Follow the instructions displayed in the setup program.**

**Note**

GCS should be chosen for installation along with the Node Managers.

Expected outcome

The setup program copies the selected files. The user is notified when the installation is complete.

Related Topics

Overview of upgrading the transmission node manager and transmission unit software

Instructions

Installing transmission node manager software from Nokia SiteWizard

Downloading FXC transmission unit software

Copying transmission unit software between transmission units

Installing transmission node manager software from Nokia SiteWizard

Instructions

Overview of upgrading the transmission node manager and transmission unit software

Downloading FXC transmission unit software

Copying transmission unit software between transmission units