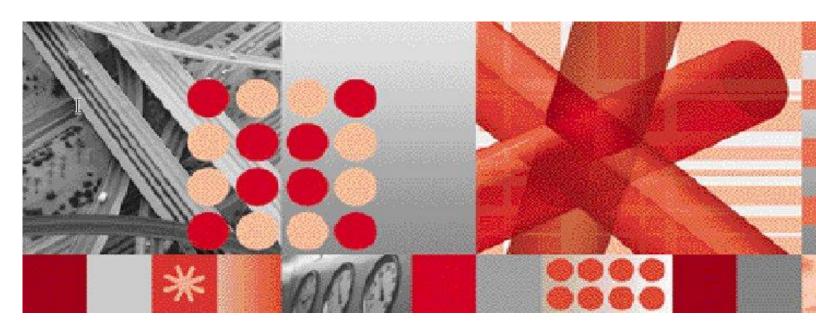


RP16.7 for Nortel EVDO8.1 / CDMA MTX18

(18.0.16.7-TIV-PROSPECT-NORCDM-FP0000.tar)



Release Notes

Document Revision Number (v2.0)

IBM Prospect RP16.7 for Nortel EVDO8.1 / CDMA MTX18®

Note: Before using this information and the product it supports, read the information in Notices section in this document.				
This edition applies to IBM Prospect Nortel RP16.7 for EVDO8.1 / CDMA MTX18 and to all subsequent releases and modifications until otherwise indicated in new editions.				

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2 About this Documentation

Table 1 below details the information provided by the *IBM Prospect*® Nortel EVDO 8.1/CDMA MTX18 RP16.7 Release Notes **hereafter called Nortel RP16.7**

Table 1 - About this Documentation

Chapter	Description
About this Documentation	An overview of the Prospect® Nortel RP16.7 documentation, which gives details of the intended audience and the structure of the guides.
Release Contents	Information on the release content included in the release.
Media Content	Details of media provided for the release.
Hardware Requirements	Details of hardware required for the release.
Software Requirements & Installation Information	Details on the Software required and the guides to be followed during the installation of the product for the release.
Known issues	Details on known issues included in the release and workarounds, if available.

2.1 Audience

The target audience of this guide is system administrators of Prospect or a person who installs / upgrades the Prospect system.

IMPORTANT: Before attempting an installation of Prospect® Nortel RP16.7 you are strongly advised to read these release notes. Failure to consult the release notes may result in a corrupt, incomplete or failed installation.

2.2 Required Skills and Knowledge

This guide assumes that you are familiar with the following:

- Knowledge of Solaris.
- General IT and telecommunications principles
- Basic knowledge of Oracle database
- Ability to run shell and Perl scripts.
- Knowledge of Prospect administrator scripts and client / Pweb interface

This guide also assumes that you are familiar with your company's network and with procedures for configuring, monitoring, and solving problems on your network.

2.3 Document Conventions

The following command prompts can be seen throughout this document where the user has to enter commands at the command line:

- # (hash): This prompt will be displayed if the user is logged in as user root.
- \$ (dollar): This prompt will be displayed if the user is logged in as either the server or oracle user.

Please note the above prompts are not part of commands. All commands must be entered after these prompts.

This document uses the typographical conventions shown in the following table:

Table 2 - General Document Conventions

Format	Examples	Description
ALL UPPERCAS E	GPS NULL MYWEBSERVER	Acronyms, device names, logical operators, registry keys, and some data structures.
Link	See www.sun.com	For links within a document or to the Internet.

Bold	Note : The busy hour determiner is	Heading text for Notes, Tips, and Warnings.
SMALL CAPS	The STORED SQL dialog boxclick VIEW In the main GUI window, select the FILE menu, point to NEW, and then select TRAFFIC TEMPLATE.	Any text that appears on the GUI.
Italic	A busy hour is A web server must be installed See the User Guide	New terms, emphasis, and book titles.
Monospace	<pre>./wminstall \$ cd /cdrom/cdrom0 /xml/dict addmsc.sh core.spec Type OK to continue.</pre>	Code text, command line text, paths, scripts, and file names. Text written in the body of a paragraph that the user is expected to enter.
Monospace Bold	[root] # pkginfo grep -i perl system Perl5 On-Line Manual Pages system Perl 5.005_03 (POD Documentation) system Perl 5.005_03	For contrast in a code example to show lines the user is expected to enter.
<monospac e italics></monospac 	#cd <oracle_setup></oracle_setup>	Used in code examples: command-line variables that you replace with a real name or value. These are always marked with arrow brackets.
[square bracket]	log-archiver.sh [-i][-w][-t]	Used in code examples: indicates options.

2.4 User Publications

The following user publications are provided with the Prospect® Nortel RP16.7 software in Adobe® PDF and HTML formats.

Table 3 - Prospect® Nortel RP16.7 User Publications

Document	Description
DA_Tools.pdf	Prospect Data Acquisition Tools Guide
PerfDataRef.pdf	Prospect Performance Data Reference

2.5 Accessing Publications online

All of the IBM Prospect Core publications, including Prospect Core Release Notes, are available online from the IBM Information Center website as follows:

http://publib.boulder.ibm.com/infocenter/tivihelp/v8r1/index.jsp?topic=/com.ibm.netcool_pm.doc/IBM_Prospect_060308.htm

RP16.7 release notes are found in the customer portal site.

2.6 RP16.7 Release Description

This document provides information on the upgrade release to Prospect® 8.0 Nortel RP16.7 (18.0.16.7.0.3). The software is named 18.0.16.7-TIV-PROSPECT-NORCDM-FP0000.tar

The RP16.7 release is a cumulative upgrade that contains the following upgrade releases.

- RP16 (EVDO 6.0 along with Core 8.0.5)
- RP16.1 (MTX16/NBSS16 support),
- RP16.2 (EVDO7 support)
- RP16.3 (EVDO8 support)
- RP16.4 (MTX17/NBSS17 support)
- RP16.5 (Support for concatenated EVDO data)
- RP16.6 (EVDO 8.1 support).
- RP16.7 (MTX18/NBSS18 support)

That means customers on RP15.3 can upgrade to RP16.7 directly. However due to certain issues with the above cumulative upgrade path, it is recommended to follow the suggested upgrade path in the next section.

Other features of this release are listed below.

• RP16.7 upgrade is a vendor release only.

• The Core versions certified against this release are Core 8.0.6.8, Core 8.0.7.0, Core 8.0.7.5 and Core 8.0.7.6 (See Note 2 on this release below).

This means that the Prospect server needs to be at Core 8.0.6.5 at the very least to install RP16.7

Note 1: (For customers who have not installed RP16.6)

It is very important that customer apply the Core 8.0.6.5 patch before applying RP16.6. (Otherwise the upgrade of RP16.6 will fail).

Note 2: (For customers on Core 8.0.7.3 irrespective of the vendor version)

If the current Prospect server is on Core 8.0.7.3, then it is very important that you run the wminstall for RP16.7 in the preview mode. The preview mode will invoke a script (check_for_invalid_cons.ksh) which will find and fix the incorrect constraints. The result of this check should be PASS in the preview. If you find the result to be FAIL, then please contact product support as the upgrade could fail without the fix.

Note 3: (For customers on Core 8.0.6.1 or older Core releases)

Core 8.0.6.3 or Core 8.0.6.4 are no longer needed as Core 8.0.6.5 is a cumulative upgrade. If customer still needs to apply Core 8.0.6.3 or Core 8.0.6.4 patches, it is important to apply them after RP16.3 only. (Otherwise EVDO load will be impacted)

• The DA Toolkit certified against this release is 7.1.

There is an update to DA for RP16.7 (7.1.16.7-TIV-PROSPECTDA-NORCDM-FP0000.tar) . Please see DAT Release notes for details.

• The Oracle Database version certified against this release is Oracle 9i (9.2.0.8) and Oracle 10g (10.2.0.4).

Please see the table in the Prerequisites section for other compatibility related information.

2.6.1 Recommended upgrade path for customers

Most Nortel customers are expected to be on the latest release - RP16.6 and Core 8.0.6.5 (at least). **Core 8.0.6.5 should have been installed before RP16.6. Here are the suggested upgrade paths for such customers.**

```
RP16.6 (with Core 8.0.6.5) -> Core 8.0.6.8 -> RP16.7
RP16.6 (with Core 8.0.6.5) -> Core 8.0.7.0 -> Core 8.0.7.6 -> RP16.7
```

Important Note: Installing Core 8.0.7.6 (or other Core 8.0.7.0 patches) AFTER RP16.7 will cause EVDO load issues because the EVDO configuration is altered. Hence it is recommended that RP16.7 should be installed after the core patch is applied.

For customers on older releases, the following upgrade paths are recommended. The customers can select one or the other based on whether they want to upgrade to the next core release or stay with the Core 8.0.6.

RP16.3 or RP16.4 with Core 8.0.6 or later -> Core 8.0.6.5 or Core 8.0.6.8 -> RP16.7 RP16.3 or RP16.4 with Core 8.0.6 or later -> Core 8.0.7.0 -> Core 8.0.7.6 -> RP16.7

2.7 Prerequisites

The table below shows all the prerequisites at a glance.

It is highly recommended that customers either apply the Core 8.0.6.5 or Core 8.0.6.8 or Core 8.0.7.0 upgrade + Core 8.0.7.6 before applying RP16.7. (See Note 2 in Section 2.6 if you plan on this last upgrade path)

For customers that use Pweb to access Prospect data, it is recommended that Pweb 2.2.6-PROSPECTWEB-IF0003 or PWeb 2.2.7 be applied before Core 8.0.6.5 is applied to Prospect server.

Prospect Component	Version Supported
Prospect Vendor	RP16.3, RP16.4, RP16.5, RP16.6
Prograat Core	8.0.6.5, 8.0.6.8, Core 8.0.7.0, Core 8.0.7.4, Core
Prospect Core	8.0.7.5, Core 8.0.7.6
Prospect Client	8.0.5.0.06, 8.0.5.8, 8.0.6.0.13, 8.0.6.5, 8.0.7.0.13,
	8.0.7.4.2, 8.0.7.5.2, 8.0.7.6.2
Progrest Web	2.2.5, 2.2.6, 2.2.6.1, 2.2.6.2, 2.2.6.3, 2.2.7.0.13,
Prospect Web	2.2.7.4.2 , 2.2.7.5.2, 2.2.7.6.2
Oracle	Oracle 9i (9.2.0.8 on Solaris 9) and
Oracle	Oracle 10g (10.2.0.4 on Solaris 10)
Solaris	9 and 10
DAT	DA_7.1_Nortel_CDMA_RP16.7_Upgrade
Perl	5.6.1
JDK	1.5.0_13

Table 4 - List of components compatible with RP16.7

3 Release Contents

The main features of RP16.7 include the CBRS enhancement to the DAT, Prospect loaders and MTX18/NBSS18 support. This section describes new features and enhancements made in RP16.7.

3.1 New features

3.1.1 CBRS enhancements to Prospect

As of RP16.6, Prospect supported the loading of the CBRS data. In RP16.7, this component has more features added to it such as support for MTX15 through MTX18 data formats, automatic generation of cbrs.cfg for each CBRS and support of some new components and cardtypes. (listed at the end of this section)

More Information: The parsing of CBRS passport statistics file requires configuration data which identifies the functional processor card associated with a component. In the past, the configuration information was stored in a static file (cbrs.cfg) and was maintained by customer. Starting this release, the means of obtaining the configuration information will be automated.

- DAT collects the new CBRS view file from BSM, which contains the card and slot number of various components.
- Customer should place the new rdf file per MTX release in the following DAT directory:
 - Path: **\$FLEXDAHOME/cfg** where **\$FLEXDAHOME** is the DA installed path.
 - Filename convention: **<MTX_VERSION>.pp_sta.rdf** where **<**MTX_VERSION> is the numeric of MTX release. Eg. 17.pp_sta.rdf for MTX17.
- DAT script uses the first Passport statistics file (*.bdf) collected for the day and CBRS view file to auto generate the <CBRSNAME>.cbrs.cfg file.
- DAT and Prospect are enhanced to support the following card types and components, New items are listed in **bold type**:
 - Card type: 16pOC3, 6mAppS, CPeD, 24pBCN, CP, 11pMSW, 24pBCNW and 4pOC3.
 - Components: **CpeBcnEp**, **ATMInterface**, **Sctp**, **SctpAssociation**, **SctpAssociationPath**, LogicalProcessor, BtsBcnIf, IsshoBcnIf, CiuBcnIf, CpeBcnEp, SbsBcnIf, DiscoBcnIf and BssmBcnIf
- The following new entities are introduced in this release: Sctp, SctpAssoc, SctpAssocPath and ATMIf.

3.1.2 Nortel MTX18A Support for SDM filetype

Provided below are the new OM groups for MTX18A release and the pegs added for the affected OM Groups (for the SDM filetype). New entities and new groups are indicated in **bold** type. Note: Each OM metric may map to multiple Prospect pegs due to the detail provided by the template indices.

Table 5 - Newly Supported OM Groups.

Entity	OM Group	Releases	File Type	New Pegs	Extn Reg	Notes
	ACECPBS2	18	SDM	0	14	This group provides extension register to ACECPBSC OM group
	ACNLL	18	SDM	8	8	New Group
	BCNDRVRX	18	SDM	7	7	New group
BSC	BCNDRVTX	18	SDM	7	7	New group
	STLARX	18	SDM	9	9	New group
	STLATX	18	SDM	15	15	New group
	STLBRX	18	SDM	7	7	New group
	STLBTX	18	SDM	14	14	New group
Cell_Sector	CAUDATS2	18	SDM	1	0	Modified group
Cell_Sector	CAUSCT2	18	SDM	4	0	Modified group
	ACNSL	18	SDM	16	16	New group
	ACNTRANS	18	SDM	6	6	New group
NSA	BCNDRVFL	18	SDM	4	4	New group
	BCNTRAN	18	SDM	9	9	New group
	NSANATOL	18	SDM	13	13	New group
	NSASOSOL	18	SDM	9	9	New group
	TRK2NET1	18	SDM	17	0	New group
Trk_Bearer	TRK2NET2	18	SDM	0	9	This group provides extension register to TRK2NET1 OM group
PM	CAUCPSY2	18	SDM	0	8	This group provides extension register to CAUCPSYS OM group
Total new pegs for MTX18A			146	139	g state out group	

3.1.3 Support for NBSS18

This section lists the affected BSC OMs and BTS OMs (Advanced Sector MOs) added as part of the NBSS18 upgrade.

BSC OM

BSC OM	Group ID	Entity	New Pegs	File Type	Notes
3GRevLink_Performance	89	Sector_Carrier	3	BSC	New group
Total new pegs for NBSS18 BSC (OM	3			

BTS OM

Advanced Sector MO	Seq#	Entity	New Pegs	File Type	Notes
FchOriginationNonBlockingSMS	373	Sector_Carrier	1	MCBTS	New group
FchHandoffNonBlockingSMS	374	Sector_Carrier	1	MCBTS	New group
BlockedFchOriginationsSMS	375	Sector_Carrier	14	MCBTS	New group
BlockedFchHandoffsSMS	376	Sector_Carrier	14	MCBTS	New group
FchOriginationNonBlocking3GD owngrade2G	377	Sector_Carrier	1	MCBTS	New group
FchOriginationNonBlocking3GD owngrade2gSMSNoBcn	378	Sector_Carrier	1	MCBTS	New group
SMSTransmittedInReservedChan nel	379	Sector_Carrier	3	MCBTS	New group
ResourceReleaseReqTCELinkTi meout	380	Sector_Carrier	1	MCBTS	New group
Total new pegs for NBSS18 BTS OMs					

Extension registers will be combined with the primary register to provide a single Prospect peg. Spare registers will not be supported as they contain no valid data.

3.1.4 Support for loading Cluster RNC configuration file

In this release, Prospect supports loading of the RNC configuration file containing cluster information. This file will be collected by the DAT and transferred to the Prospect file system along with other RNCcfg files. Here are a few notes about this feature:

- 1) The collection and load of this file is optional. If customers want the ability to run reports that can be grouped by CluserID, then they can collect and load this file. Note that the ability to run "group by" reports is available on Pweb only. (Not on Classic Client)
- 2) The SQL query below should be run at the EMS once a day to collect the data into the file: /appdata/dcFiles/clusterQuery<MMDDYYYY_HHMM>.txt , is shown below
 - select distinct RNCIPADDRESS, RNCCLUSTERID, RNCCLUSTERPRIMARYHOMEDSTATUS, RNCLOADLEVEL from CLUSTERRNCTABLE;

The formatting options for the file generated as a result of the query should be same as other RNCcfg files being collected already by DAT.

3) The location of the file on the EMS and its corresponding Prospect File Name is in the table below. The file will automatically be loaded into Prospect database if it is found in the ftpIN/MTXnn/in directory.

NE	Datatype	Source File naming convention	Prospect FileName		
EMS	RNCcfg	/appdata/dcFiles/clusterQuery <mmddyyyy_hhmm>.txt</mmddyyyy_hhmm>	<rnc_id>.CLUSTER.<tstamp>.RNCcfg[.gz]</tstamp></rnc_id>		

3.1.5 Senty.txt file changes

Sentry.txt is a configuration file that is used by the Prospect "sentry" process to detect data files in the ftpIN directory for loading. It contains entries for each MSC or RNC defined in the \$PROSPECT_HOME/msc_list. The number of entries in the msc_list determines the size of the Sentry.txt file. Too many entries in Sentry.txt could cause some degradation in load times. In RP16.7, we have added some capability to reduce the size of Sentry.txt by providing a new script called \$PROSPECT_HOME/set_msclist_option. The script has options that can reduce the number of entries in Sentry.txt. Once the options are set, customer needs to:

- 1) Run the command [flexpm] addmsc.sh -remake
- 2) Bounce the sentry for the new changes to take effect. [flexpm] ps-mgr restart sn

Note:

- For customers who do not want to make changes to the current Sentry.txt, no changes are needed.
- Use 'set msclist option –help' to get help on the options
- The default value for all the flags is "Y"

Details on the 3 options: SDM, MTX, UNCOMMON as below:-

a) SDM option

\$ set_msclist_option SDM="Y"

\$ set_msclist_option SDM="N"

The SDM option controls the loading of the SDMcsv files in the ftpIN directories.

Setting this option to Y tells the make-sentry to create the record in the Sentry.txt that will allow loading of SDMcsv files.

Default value for this option is Y. Customers loading SDMcsv data files should set this option to Y. f you do not load these files, set this flag to N.

b) MTX option

\$ set_msclist_option MTX="Y"

\$ set msclist option MTX="N"

The MTX option controls the loading of MTXpm files in the ftpIN directories.

Setting this option to Y tells the make-sentry to create the record in the Sentry.txt that will allow the loading of MTXpm files.

Default value for this option is Y. Customers loading MTXpm data files should set this option to Y. If you do not load these files, set this flag to N.

c) UNCOMMON option

\$ set msclist option UNCOMMON="Y"

\$ set_msclist_option UNCOMMON="N"

The UNCOMMON option controls the loading of certain old Nortel datatypes. This includes MTXom30, ACT.LOG, CAP.LOG, CALLFAIL.LOG, MCD3100.LOG, SYSEXCP.LOG, MTX140.LOG datatypes.

Default value for this option is Y. If you are loading one or more of the above datatypes, set this option to Y. If not, set this option to N

NOTE: The Prospect administrator needs to carefully determine which options need to be applied to the server. This depends on the datafiles that are loaded on the server. Setting the incorrect options will affect data loading.

3.1.6 Resolved PMRs/APARs

Following is a list of problems present in the previous release that have been resolved.

Table 6: Release Details - Resolved Issues

ClearQuest ActivityID / APARName / PMR Number	Problem Description	
alm00155779/ IZ80186/ PMR 20081,999,000	Nortel EVDO T1E1Template counters need Aggregation type to be updated to "Average"	
alm00184891/ IZ77401/ PMR 17151,999,000	RNCPM RAW FILES are being processed in incorrect order based on unix timestamp.	
alm00199149/ IZ79676/ PMR 50338,370,000	Sentry.txt Too Big	
alm00184880/ IZ76335/ PMR 51883,370,000	Nortel PVG Files Stranded (PVG files are picked up late by the sentry process)	
alm00199193/ IZ80109/ PMR 44795,370,000/ PMR 17761,999,000	SBS TRK Data Missing from BSC1	
alm00205457/ IZ84780/ PMR 24803,999,000	Missing MOU since upgrade MTX and BSC to MTX17	
alm00199250/ NO APAR	Issue with using nohup in background	
alm00198055/ NO APAR/ NO PMR	Customer Request: RNCpm files should be zipped up after processing.	

4 Media Content

Prospect® Nortel RP16.7 is composed of the following media:

- 1. Prospect software 18.0.16.7-TIV-PROSPECT-NORCDM-FP0000.tar
- 2. DA Software 7.1.16.7-TIV-PROSPECTDA-NORCDM-FP0000.tar
- 3. Release notes for Prospect and DA.
- 4. Documentation: DA_Tools.pdf , PerfDataRef.pdf

5 Software Requirements & Installation

5.1 Software Requirements

To view the software products required to upgrade to Prospect® Nortel RP16.7, refer to the Prospect Release note, which is included in the release media packaging (CD/DVD) or online download via web portal.

5.1.1 Supported Platforms

See Pre-requisites section for a table with all supported software.

5.2 Pre-Upgrade Checks

The following instructions are for install of Prospect® 8.0 for Nortel RP16.7. For further information consult the *Prospect Installation Guide*.

<u>Important!</u> Un-installation of this upgrade is not supported. A <u>complete system back up and export</u> of Prospect documents is recommended before installing this upgrade.

5.2.1 Check Prerequisites

Please see the Section 2 Table 4 for the prerequisites. Note the Prospect Core version and make sure to use the preview option in wminstall if you have Core 8.0.7.3. **Note that these upgrades could take a while and ensure that there are no cron jobs or backup software/reports accessing the Prospect database for the duration of the upgrade.**

5.2.2 Baseline and Patches Requirements

The base environment that this patch will be applied against is RP16.6. See the various upgrade paths below.

- 1. Prospect 8.0 Nortel MTX13 RP11 Base Release (FRESH INSTALL PATH):
 - Prospect 8.0 Nortel MTX13 RP11Fresh Install
 - Prospect 8.0 Nortel MTX13 RP11 Patch10
 - Prospect 8.0 Nortel MTX13 RP11 HF11
 - Prospect 8.0 Nortel MTX14 RP12
 - Prospect 8.0 Nortel MTX14 RP13
 - Prospect 8.0 Nortel MTX14 RP14
 - Prospect 8.0 Nortel MTX14 RP14 Patch 10
 - Prospect 8.0 Nortel MTX15 RP15 (Core upgrade)

- Prospect 8.0 Nortel MTX15 RP15.1
- Prospect 8.0 Nortel MTX15 RP15.2
- Prospect 8.0 Nortel MTX15 RP15.3
- Prospect 8.0 Nortel MTX15 RP15.3 Patch10 (Optional)
- Prospect 8.0 Nortel MTX15 RP16
- Prospect 8.0 Nortel MTX16 RP16.1
- Prospect 8.0 Nortel MTX16 RP16.2
- Prospect 8.0 Nortel MTX16 RP16.3
- Prospect 8.0 Nortel MTX16 RP16.4
- Prospect 8.0 Nortel MTX16 RP16.5
- Prospect 8.0 Nortel MTX16 RP16.6
- Prospect 8.0 Nortel MTX16 RP16.6 HF1 (Optional)

2. Prospect 8.0 Nortel MTX15 RP15.3 Base Release (FRESH INSTALL PATH):

- Prospect 8.0 Nortel MTX15 RP15.3 Fresh Install
- Prospect 8.0 Nortel MTX15 RP15.3 Patch10 (Optional)
- Prospect 8.0 Nortel MTX15 RP16
- Prospect 8.0 Nortel MTX16 RP16.1
- Prospect 8.0 Nortel MTX16 RP16.2
- Prospect 8.0 Nortel MTX16 RP16.3
- Prospect 8.0 Nortel MTX16 RP16.4
- Prospect 8.0 Nortel MTX16 RP16.5
- Prospect 8.0 Nortel MTX16 RP16.6
- Prospect 8.0 Nortel MTX16 RP16.6 HF1 (Optional)

3. Prospect 8.0 Nortel MTX15 RP16.0 Base Release (FRESH INSTALL PATH)

- Prospect 8.0 Nortel MTX15 RP16 Fresh Install
- Prospect 8.0 Nortel MTX16 RP16.1
- Prospect 8.0 Nortel MTX16 RP16.2
- Prospect 8.0 Nortel MTX16 RP16.3
- Prospect 8.0 Nortel MTX16 RP16.4
- Prospect 8.0 Nortel MTX16 RP16.5
- Prospect 8.0 Nortel MTX16 RP16.6
- Prospect 8.0 Nortel MTX16 RP16.6 HF1 (Optional)

<u>Important!</u> It is critical that you apply this patch to an environment at the correct patch level. Please verify the environment carefully. For more information, please contact IBM customer support.

5.2.3 Disk space and Tablespace Requirement

The installation of the patch requires additional 500 MB disk space under /u01 file system. The install script also requires that at least 10% of total tablespace size is available for each tablespace. Please contact IBM customer support if there is less than 10% of total tablespace available for any of the tablespaces.

The additional Oracle table space is required to support the changes in tables introduced in this release. The following lists the disk requirement for each table space during install only. More will be required depending on data volume:

TRAFFIC_JUMBO: 1GBTRAFFIC_LARGE: 500MB

• TRAFFIC_MEDIUM: 300MB

• TRAFFIC_SMALL:100MB

• WM_FLEXPM: 50MB

CONFIG: 50 MB

<u>Note:</u> It is recommended to always keep 10% of total table space size available for each table space in the Prospect system other wise the wminstall with preview option will fail. However if you have a few Gigs free in ALL the tablespaces, and if the wminstall **with preview** fails, then consult the product support to see if the 10% requirement can be reduced.

5.2.4 Third-party software usage - gtar

gtar is being used for the file extraction of the upgrade package. Make sure gtar is available at the below location.

\$ ls -la /usr/sfw/bin/gtar

-r-xr-xr-x 1 root bin 195400 Jan 23 2005 /usr/sfw/bin/gtar

Also make sure you are accessing gtar from the above location. Run the following command and check that the result is same as shown below. Remove other occurrences of gtar or change the PATH environment variable to use the location mentioned above.

\$ which gtar

/usr/sfw/bin/gtar

5.2.5 Oracle version

It is **highly** recommended that the Oracle version on the Prospect server is either 9.2.0.8 or 10.2.0.4. Other versions are not supported. The wminstall preview command will check for these specific versions and will throw out warnings if this check fails.

5.2.6 Perl Version

Make sure that /usr/bin/perl is version 5.6.1. Type the following command to verify:

\$ /usr/bin/env perl -v

The first line of the output should show:

This is perl, v5.6.1 built ...

Note: If the Perl version is incorrect, the installation will not proceed.

5.3 Installation Privileges Required

Privilege	Required
Oracle flexpm user DBA role	No
UNIX flexpm user in DBA group	Yes
Root privilege for non-split server setup	No
Root privilege for split server setup	Yes
Oracle sys user password set to default (change_on_install)	Yes

Important! Please do not proceed with installation if the required privileges are not present.

Split Server setup means the Oracle database and the Prospect application reside on separate servers.

5.3.1 Oracle Sys Account Access

Prospect 8.0 requires that all logins using the sys account must be qualified *as* sysdba. The following Oracle changes are required.

1. Verify that the change is needed. From a remote system (that is, not the Prospect server), try to log in using sqlplus:

\$ sqlplus /nolog

SQL> connect sys/change_on_install@flexpm as sysdba

Note: If you can log in, you can skip the rest of this procedure.

- 2. If you get an error concerning privileges, then you need to continue with the following steps.
- 3. Set the remote_login_passwordfile parameter in the init<sid>.ora file. On most Prospect systems the sid is flexpm. Log in as the oracle user, and then enter the following command.

\$ cd \$ORACLE_BASE/admin/flexpm/pfile

4. Edit the init<sid>.ora file (for example, initflexpm.ora) and add the following line.

remote login passwordfile=EXCLUSIVE

5. Create the Oracle password file to allow remote sys access. While still logged in as the oracle user verify that \$ORACLE_HOME and \$ORACLE_SID are correct, then enter the following command.

```
$ orapwd file=${ORACLE_HOME}/dbs/orapw${ORACLE_SID} \
password=change_on_install entries=10
```

- 6. Bounce the database so that the parameter and password file take effect. If you get an error concerning the password file, verify that it is in the dbs directory and that the filename is orapwflexpm.
- 7. To verify that the changes have taken effect, repeat step 1.

5.4 Pre-Installation Instructions

5.4.1 System Backup

This upgrade cannot be uninstalled. This upgrade involves updates to the database and the metadata, therefore recovery from backup is the only way to reverse the changes made by this upgrade. You must perform a full system backup before installing this upgrade. If needed, please refer to the "Backing up the Database" section of the Prospect Administration Guide. Please contact IBM customer support if you require further support.

5.4.2 Recommend Export of Prospect documents

As mentioned in the above paragraph the upgrade cannot be reversed and if for some reason the upgrade fails, restoration from backup is the only option and if there is no good backup then customer will have to do a fresh install. Hence it is **highly recommended** that users do "export_docs.sh -h". This will show the parameters necessary to invoke the script. Once the script is invoked with appropriate parameters, it can export all user documents such as templates/reports/UDCs etc. Then on a fresh install system user can import the user documents. For more details please refer to the Admin Guide.

5.4.3 Prospect Web

<u>Important!</u> Disable server access in Prospect Web and any backup software that could be accessing the database objects at this time.

If Prospect Web is accessing this Prospect installation, then use the admin tool to disable the corresponding data source. Failure to do this step may results in errors in the upgrade. Consult IBM customer support if you have questions. Also do consult your system administrator to ensure that there are no oracle backup jobs running at this time. It is important that the database objects are not accessed in anyway during the upgrade.

5.4.4 Information Check and Pre-Installation Setup

The following instructions must be executed on the Prospect server before the upgrade:

- 1. Log in as user flexpm.
- 2. Source the profile. This can be done by

```
[flexpm] $ . ./.profile
```

3. Stop the middleware.

```
[flexpm] $ ps-mgr stop all
Wait until you see: Command complete: stop all.
[flexpm] $ ps-mgr halt
```

4. Backup current retention period for past part maint.sh:

```
[flexpm] $ past_part_maint.sh > $FLEXPM_BASE/past_part_maint.bak
```

5. Place the downloaded tarball at /var/tmp or wherever you have enough space and go to the location of the installer and un-tar the file.

```
[flexpm] $ cd /var/tmp
```

[flexpm] \$ mkdir INSTALL_NORTEL

[flexpm] \$ cd INSTALL NORTEL

[flexpm] \$ tar -xvf 18.0.16.7-TIV-PROSPECT-NORCDM-FP0000.tar

[flexpm] \$ cd /var/tmp/INSTALL NORTEL/sun-server-1/WMInstall

6. Read the license agreement in *license.txt* and edit *responseFile.txt* In prior releases, the user had to type in "yes" to accept the license agreement. In this release, the user can read the *license.txt* (present in /var/tmp/INSTALL_NORTEL/sun-server-1/WMInstall directory or wherever you extracted the tarball).

If user agrees with the license text, then they should edit the *responseFile.txt* (present in /var/tmp/INSTALL_NORTEL/sun-server-1/WMInstall directory or wherever you extracted the tarball) and set LICENSE_AGREEMENT to "true" like shown below. The default value for this parameter is false. It needs to be set to true for the upgrade to proceed.

LICENSE_ACCEPTANCE = true

7. Check the FLEXPM HOME

[flexpm] \$ env | grep FLEXPM HOME

The output would look like either

- a) FLEXPM_HOME=/u01/apps/WatchMark/FlexPM/NorCDMA Or
- b) FLEXPM HOME=/u01/apps/WatchMark/FlexPM/NortelMTX

Note: The last part of the FLEXPM HOME variable needs to be used in the "-i" option below.

If the FLEXPM_HOME=/u01/apps/WatchMark/FlexPM/NorCDMA then use the following command to do the install preview. (The entire command should be typed as one continuous line)

```
[flexpm] $ ./wminstall -r responseFile.txt -b
/u01/apps/WatchMark/FlexPM -i NorCDMA -spec spec.xml -d $DB_CONNECT
-portbase $PORT GROUP -preview
```

If the FLEXPM_HOME=/u01/apps/WatchMark/FlexPM/NortelMTX then use the following command to do the install preview. (The entire command should be typed as one continuous line)

```
[flexpm] $ ./wminstall -r responseFile.txt -b
/u01/apps/WatchMark/FlexPM -i NortelMTX -spec spec.xml -d
$DB CONNECT -portbase $PORT GROUP -preview
```

Note: If you are on Oracle 9i environment, replace spec.xml with spec9i.xml in the commands above

Notes about wminstall return codes

• <u>Note1</u>: If you get an error about the check_UDC_match.sh that means there is a UDC in your system with the same name as a new Pcalc being introduced in the upgrade. You can determine which UDCs are matching using the check_UDC_match.sh. The script will output UDCs with same name as Prospect PCALC to be introduced in this release. If there is an output like the one below which means there is/are one or more matching UDC(s) that has the same name as Prospect PCALC. In this case, **DO NOT PROCEED** with the upgrade. Instead, run the following steps to fix this issue first.

If the script does not output anything, then it is ok to proceed with the upgrade. The script needs a parameter 2.

Execute the script below to ensure there is no UDC with the same name as PCALC.

```
[flexpm] $ cd /var/tmp/INSTALL_NORTEL/sun-server-1/WMInstall/scripts
[flexpm] $ ./check UDC match.ksh 2
```

Important Note A:

Sample script output with one UDC match.

```
UDC_NAME UDC_FIELD_ID ENTITY_NAME

perSectorRUPercent000 16443 DOM Sector
```

Steps to fix:

e.g To fix the UDC above, we will change the UDC to have a "_IBM" by executing the command below. It can also be changed to any other name that will help other users locate this UDC easily.

```
[flexpm] $ sqlplus $DB_CONNECT
SQL> update wmd_dict_name set name='perSectorRUPercent000_IBM'
where name='perSectorRUPercent000';
SQL> commit;
SQL> exit;
```

Important Note B:

If there are more than one matching UDCs, please run the above SQL update statement for EACH UDC that is output by the <code>check_UDC_match.ksh</code> (If you have any doubt, call IBM customer support to confirm BEFORE proceeding with the upgrade). Once satisfied that all UDCs were renamed, run the <code>check_UDC_match.ksh</code> one more time to make sure the script does not output any UDCs.

This step has to be repeated until no rows displayed (no UDC that has the same name as the Prospect PCALC).

<u>Note</u>: All templates that use perSectorRUPercent000 will use the new PCALC and not the UDC unless a manual change is made to the template.

• <u>Note 2</u>: If you get an error about the check_db_lock.sql, then you need to run the following script to determine which objects are locked. The DBA should be able to remove these locks. **Locks on database objects could potentially cause the upgrade to fail and should be removed before the upgrade is started.**

Check for existing processes locking Oracle objects for flexpm user using the following SQL script.

```
[flexpm] $ cd /var/tmp/INSTALL_NORTEL/sun-server-1/WMInstall/scripts
[flexpm] $ check db lock.sh 2
```

Important Note: The script should return no rows before you proceed with the upgrade.

- Note 3: Both the above scripts should be run right before the actual upgrade. That means, if these commands are run hours / days before the upgrade, then they still need to be re-run right before the upgrade to prevent failures.
- Note 4: If you get a warning about the space in /var/tmp even though df -k shows that /var/tmp has enough space then use the -t /home/xyz option in wminstall (/home/xyz is any valid directory that can be used as a temp directory and has 400MB free.)

Example warning message below:

Warning scripts/check_space.class -s 400 -i /var/tmp Return Code: 1

5.5 Installation Instructions

Follow the steps below for upgrade of Nortel RP16.7

Important Steps for Split Server Configuration: A split server configuration for Prospect has the database and the application software residing on separate physical servers. If your server is NOT configured this way, you can proceed with install step 1. If you have a split Server configuration, please follow instructions below to mount the /u01/apps/WatchMark/FlexPM/NorCDMA or NortelMTX directory to the database server. (Otherwise the upgrade will fail) These instructions will need the root password of the database server and Prospect server both.

- a. On the Prospect middleware server, make sure the proper NFS daemons are started.
 [root] \$ /etc/init.d/nfs.server start
 - [root] \$ share -F nfs -o rw=<IP Address of DB Server> /u01/apps/WatchMark/FlexPM/NorCDMA
- b. On the Oracle database server create the required mount point [root] \$ mkdir -p /u01/apps/WatchMark/FlexPM/NorCDMA

- c. Mount the Prospect file system on the Database Server [root] \$ mount -f nfs <IP Address Of ProspectServer>:/u01/apps/WatchMark/FlexPM/NorCDMA /u01/apps/WatchMark/FlexPM/NorCDMA
- d. Make sure that the /u01/apps/WatchMark/FlexPM/NorCDMA file system and its sub-directories are accessible on the database server. Log off the database server. You can proceed with the upgrade

(Please contact customer support in case you have questions before proceeding with the upgrade)

5.5.1 Installation Steps

- 1. Log in as user flexpm
- 2. Source the profile. This can be done by

```
[flexpm] \ \$ \quad . \ ./.profile
```

3. Stop the middleware.

```
[flexpm] $ ps-mgr stop all
Wait until you see: Command complete: stop all.
[flexpm] $ ps-mgr halt
```

4. Go to the directory that contains the Prospect software.

```
[flexpm] $ cd /var/tmp/INSTALL_NORTEL/sun-server-1/WMInstall/Run the installation tool by typing the following command. This command installs the upgrade (Make sure the -i option is entered correctly as explained below). It is possible to run the command in the background with No Hangup (nohup) if you are using Solaris 9 or Solaris 10. Please note that the nohup option is NOT SUPPORTED for Solaris 8.
```

Note: If you are on Oracle 9i environment, replace spec.xml with spec9i.xml in the commands below

If the FLEXPM_HOME=/u01/apps/WatchMark/FlexPM/NorCDMA then use the following command to start the install

```
[flexpm] $ nohup ./wminstall -r responseFile.txt -b
/u01/apps/WatchMark/FlexPM -i NorCDMA -spec spec.xml -d $DB_CONNECT
-portbase $PORT GROUP < /dev/null &</pre>
```

If the FLEXPM_HOME=/u01/apps/WatchMark/FlexPM/NortelMTX then use the following command to start the install

```
[flexpm] $ nohup ./wminstall -r responseFile.txt -b
/u01/apps/WatchMark/FlexPM -i NortelMTX -spec spec.xml -d
$DB_CONNECT -portbase $PORT_GROUP < /dev/null &</pre>
```

Note:

- 1. All parameters should be in the same line
- 2. The output of the wminstall command will go to *nohup.out* as well as the usual install log in the /var/tmp/yyyy_mm_dd*.

```
[flexpm] $ cd /var/tmp
[flexpm] $ ls -ltr
```

General Notes:

• If there is not enough disk space on the destination file system, the program stops and reports an error without installing any files.

• The installation of the upgrade might take a while to complete. The main terminal where the install command was executed, may seem to hang from time-to-time at the INSTALL section for each module. The log file (with filename like <YYYY>__<MM>__<DD>__<HH>__<MM>__<SS>) under /var/tmp can be viewed from another console during the installation for the installation progress. **DO NOT terminate the upgrade at any time without consulting a product support person first.**

After wminstall is completed, please examine the detail.log or summary.log under the directory of \$FLEXPM_HOME/audit/<YYYY>__<MM>__<DD>__<HH>__<MM>__<SS>_<runningnumber> for any error messages.

The following command can be used to search through the log file.

```
$ cd $PM_HOME/audit/<YYYY>__<MM>__<DD>__<HH>__<MM>__<SS>_<runningnumber>
```

\$ egrep -i 'warning|error|fail|ora-|sp2-|pls-' detail.log > check_detail.log

Open the detail.log and search for "call_procs.sh" to make sure there are no serious errors. If you see "ERROR: call_procs.sh", call the product support for further instructions.

The following messages are harmless and can be ignored:

: create table tmp_table (field_name varchar2(200))

: ERROR at line 1:

: ORA-00955: name is already used by an existing object

: alter table NOR_DORNC_ST_TAB add instance_id NUMBER

: ERROR at line 1:

: ORA-01430: column being added already exists in table

: drop view NOR TF UAS RES VBH

: ERROR at line 1:

: ORA-00942: table or view does not exist

: drop view NOR TF UAS VBH

: ERROR at line 1:

: ORA-00942: table or view does not exist

5. Check the installation on the system after upgrade is complete. The output should look like shown below.

[flexpm] \$ show installed

The version numbers (rev) should be the same as shown above. The build numbers (e.g. b0, b1, b2 or b3, etc) might be different. The install type (INSTALL, PATCH or UPGRADE) is not important. The install dates and times will be different from those shown.

6. Start the middleware by running the following command.

[flexpm] \$ ps-mgr init

7. Log off as *flexpm*.

5.6 Post-Installation Instructions

5.6.1 Setting up NEType and cleanup

- 1. Login as flexpm, if not already logged in.
- 2. Source the .profile in FLEXPM_HOME [flexpm] \$. ./.profile
- 3. Run the following step ONLY if you **did not** do the RP16.6 upgrade separately. The following step was done as part of RP16.6 upgrade already.

Update the NEtype in \$PROSPECT_HOME/msc_list file. Customers should look at the existing msc_list entries to determine if there are RNCs that need to be defined as RNC9000. It is very important for you to get the NEType correctly from the EMS Administrator for each RNC before loading the data, especially if you are loading EVDO 8.0 or 8.1 or later versions of data. The possible options are RNC and RNC9000. If NEType is defined incorrectly, EVDO data will not load due to config data mismatches. Once the NEType is determined, edit the msc_list and update the NEType to RNC or RNC9000 for specific entries, save and exit the editor. There is no need to bounce the sentry. Run the following command:

[flexpm] \$ addmsc.sh -remake

4. Remove the scratch directory where you un-tar'd the software. (e.g./var/tmp/INSTALL_NORTEL)

5.6.2 Configure Retention Period Settings

During the upgrade, the retention periods for some tables were reset back to 'Unlimited'. This needs to be **reconfigured manually** as shown below so that these tables can be managed by the nightly jobs.

1. Use the past_part_maint.bak file to set the retention period back for the following datatypes (Refer to the section on Pre-Installation Setup where this file was created.) Use the values for each of these types shown in that file for the commands below.

```
2. [flexpm] $ past_part_maint.sh traffic <traffic original value>
    [flexpm] $ past_part_maint.sh sBHDaily <sBHDaily original value>
    [flexpm] $ past_part_maint.sh sSUMWeekly <sSUMWeekly original value>
    [flexpm] $ past_part_maint.sh sSUMMonthly <sSUMMonthly original
    value>
```

Example:

[flexpm] \$ past_part_maint.sh traffic 10

(This command will set the retention period of "traffic" to 10 days)

3. Repeat step 2 above for other class types that has been reset to unlimited by the upgrade.

5.6.3 Enable server access in Prospect Web

If you disable access to the Prospect server from Prospect Web in step 5.4.3, then use the admin tool to re-enable access to the corresponding data source in Prospect Web.

5.6.4 Un-installation Procedure

This release/patch cannot be uninstalled. This patch involves updates to the database or the metadata, therefore recovery from backup is the only way to reverse the changes made by this release/patch. You must perform a full system backup before installing this patch. If needed, please refer to the "Backing up the Database" section of the *Prospect Administration Guide*. Please contact IBM customer support if you require further support.

Detail any specific installation instructions that you want to highlight as part of the release notes in this section. (This should include any specific pre-installation or post installation instructions, which are not already captured in the Prospect Installation Guide)

5.7 Release Restrictions

This release is for General availability.

5.8 Known Issues

Installing Core 8.07.4 (or later versions) on an RP16.5 or prior Nortel system will result in the following benign error message in the EVDO loader log. The data continues to load and the files will go to the "ok" directory. This issue is fixed in RP16.6

```
18:31:15,560 ERROR [DataHandler] Exception while executing post file load procedure PDO_LOAD_SAMPLE.postFileLo ad file ../../ftpIN/MTX17/in/CRNC1.200910031200.30.RNCpm java.sql.SQLException: ORA-06550: line 1, column 7: PLS-00201: identifier 'PDO_LOAD_SAMPLE.POSTFILELOAD' must be declared ORA-06550: line 1, column 7: PL/SQL: Statement ignored
```

5.9 Useful Hints

5.9.1 Procedure to "jumpstart" the Prospect queues.

If the schedule does not start after the upgrade you can use SQL script to "jumpstart" the Prospect queues. It will update next_time for jobs other than immediate and scheduled jobs. So after the upgrade is completed and the middleware is up, run schedule_maint and if the NEXT RUN is not populated for all jobs then the following sql script need to be executed. (Use either one based on what reports need to be started.)

```
[flexpm] $ sqlplus $DB_CONNECT
-- Fix non-report schedules (also fixes timezone issue).

UPDATE schedule

SET next_time = start_time, needs_msg_update = 'Y'

WHERE period NOT IN ('I', 'O')

AND NVL(end_time, sysdate) >= sysdate

AND job_type NOT IN (1, 10);
```

5.9.2 Preparsing error explained

This section explains the reasons for the following error in the callPreparse.sh output from cron. "Number of pegs in header doesn't match number of pegs in data (<number>)

If you get this error in the DA log file, it is possible that there is a "space" instead of a "tab" in the RNCpm data file before the date field. To fix this, you may have to change this in the data file using a global replace 'sed' Unix command. E.g.

```
\ sed -e 's/ 01\/19\/2007/01\/19\/2007/' RNC_ISSHO_PerfBySecondarySectorCarrier_R4.0_RNC_ISSHO_PerfBySecondarySectorCarrier_R4.0.dat > NewFile.out
```

\$ cp NewFile.out RNC_ISSHO_PerfBySecondarySectorCarrier_R4.0_RNC_ISSHO_PerfBySecondarySectorCarrier_ R4.0.dat

It is also possible to get this error when the variables in the header do not match the values in the rows below. This can typically happen during an EVDO RNC cutover from one release to next. The data generated during this interval could have this problem. It is also possible that an EVDO file has incomplete record for the last template in the file. This could happen if the EVDO file is collected too soon from the EMS while it is being written into.

6 IBM Support

6.1 Contacting IBM Support

Please use the IBM Tivoli Support website: http://www-306.ibm.com/software/sysmgmt/products/support/assistance.html

7 Documentation Addendums

None.

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