

Release Notes

Prospect® 8.0

Nortel AMPS/TDMA/CDMA MTX16 RP16.3



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1 Description

This document provides information on the upgrade release to Prospect® 8.0 Nortel AMPS/TDMA/CDMA MTX16 RP16.3 (16.0.16.3.0.1)

The RP16.3 release supports EVDO 8.0 new counters.

The RP16.3 release is a cumulative upgrade that contains RP16 (EVDO 6.0 along with Core 8.0.5), RP16.1 (MTX16/NBSS16 specific) and RP16.2 (EVDO7 specific) upgrade changes. That means customers on RP15.3 can upgrade to RP16.3 directly. More details in Section 6.1.1.

There are no changes to the Prospect Core platform(wminstall has changes), Prospect Client

The Core version certified against this release is 8.0.5.0.08, 8.0.5.8 and Core 8.0.6

The Client version certified against this release is 8.0.5.0.06.

The DA Toolkit certified against this release is 7.1.

The Prospect Web version is PWeb - 2.2.5 and 2.2.6

The Oracle Database version certified against this release is Oracle 9i (9.2.0.8) and Oracle 10g (10.2.0.3).

The following publications are included with this release.

Publication	File Name	Revision Date
Prospect Performance Data Reference	PerfDataRef.pdf	26 February 2009

To verify that you have the correct version of the Prospect publications, see the revision date in the *About this Documentation* section of any guide or Help file.

2 Prerequisites

The following is a list of components that Prospect is compatible to:

Prospect Component	Version Supported
Prospect Vendor	RP16.2 ,RP16.1,RP16,RP15.3 upgrades (See section 6.1.1 for details)
Prospect Core	8.0.5.0.08, 8.0.5.8 and 8.0.6.0 b13
Prospect Client	8.0.5.0.06, 8.0.5.8 and 8.0.6.0.13
Prospect Web	2.2.5 and 2.2.6
Oracle	Oracle 9i (9.2.0.8 on Solaris 9) and Oracle 10g (10.2.0.3 on Solaris 10)
Solaris	9 and 10 (Zoning not supported)
DAT	DA_7.1_Nortel_CDMA_RP16.2_Upgrade
Perl	5.6.1
JDK	1.5.0_13

Complete platform support information for the current release is in the *Prospect Server Preparation Guide*. Complete client hardware and software requirements are in the *Prospect Installation Guide*.

Supported Vendor Software
MTX13, MTX14, MTX15, MTX16 P-MS-C-13
NBSS13, NBSS14, NBSS15, NBSS16
EVDO 4.0/5.0/6.0/7.0/EVDO8.0
PVG
PDSN 4.0
USP

3 New Features

This section describes new features and enhancements to RP16.3.

3.1 Support for EVDO 8.0

Provided below is the number of additional pegs to be added in this release for the affected OM (Template) Groups. New entity or new groups or are indicated in **bold** type. Note: Each OM metric may map to multiple Prospect pegs due to the detail provided by the template indices.

Entity	Template	New OMs	New Prospect pegs
DO_RNC	RNCCLusterLB	1	3
	RNCPerfByRNC	6	6
	RNCPerfExtnByRNC	5	10
DO_RNC_Card	RNCPerfBySlot	6	6
	RNCPerfExtnBySlot	5	10
DO_RNC_Source	A13PerfSourceRNC	3	3
DO_RNC_TrafficType	QoSTrafficTypePerf	15	15
DOM_Card_Resource	TCAACHCCHUtilizationDurations	5	5
DOM_Sector	RnACHcapsuleCCHSyncSubSyncAsyncSlotUtilization	3	9
	RNCPerfBySectorCarrier	1	1
	TrafficTypePerfBySectorClass (see below)	0	0
Total			68

Important Note1:

This release requires that for ALL the new templates added, the ConfName in the .dat file should exactly match (the standard template name) the default name provided by Nortel (which is mentioned in the table below) for data loading to work. Other versions of the ConfName (e.g. suffixed with Release number or any other string) are not supported. For example, in some lab data we have noticed that the ConfName for certain templates is a number or a non-standard string.

eg. ConfName=21 will not work or ConfName=PerModemFlowUsageIUBE_Bob will not work. However, ConfName=PerModemFlowUsageIUBE is ok.

Entity	Template
DO_RNC	RNCCLusterLB
DOM_Card_Resource	TCAACHCCHUtilizationDurations
DOM_Sector	RnACHcapsuleCCHSyncSubSyncAsyncSlotUtilization

Important Note2:

Please note that this Prospect upgrade needs the updated DA toolkit to collect new templates added in EVDO 8.0. In the absence of the new DA upgrade, Prospect will continue to load the current templates as usual. The DA software is a separate tarball (Not part of the Prospect tarball)

3.2 run-sentry pp option replaced with new script set_evdo_option

The run-sentry script will no longer be used to set the preparer limit. Instead the set_evdo_option pp option can be used. The run-sentry script still contains rest of the functionality.

The script resides in \$PROSPECT_HOME/scripts

The script can be used to check the current value of the PREPARSER_LIMIT like this:

```
set_evdo_option pp
```

In addition, the script can be used to set a new value for the PREPARSER_LIMIT like this:

```
set_evdo_option pp=10
```

```
:(set_evdo_option) revising 'PREPARSER_LIMIT' ...
```

```
PREPARSER_LIMIT="3"      ;# set by 'set_evdo_option'
```

3.3 Usage of enhanced wminstall tool for upgrade

The wminstall tool used in this upgrade has some changes. The core.spec and modules.spec file is replaced by a single spec.xml. Also there is a new responseFile that allows installation to proceed without any manual intervention. This means user can invoke the installation in the nohup mode directly. The new wminstall also automates some checks that used to be done manually by users. These checks could help prevent upgrade failures. More details are present in the install section.

4 Resolved Issues

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

ClearQuest ActivityID / APARName / PMR Number	Problem Description
valnt00065986(Internal ticket)	Incorrect aggregation types found for DOM_If and DO_RNC_If pegs in CPU Utilization.
valnt00079303/IZ44725/PMR 91916,999,000	FINBINXPERCENT AND IFOUTBINXPERCENT SHOULD NOT BE MAX FOR TIMEAND ELEMENT AGGREGATION.
valnt00077446 / IZ43222 /PMR 79673,999,000	CSVS DATA IS GETTING THE BSC ID FROM THE DATA FILE ITSELF
valnt00078614 / IZ44075 / PMR # 92515	MTXPM OM GROUP SMSZONPG PARSING INCORRECTLY
valnt00079149 / IZ44620 /PMR 39931,370,000	LENGTH OF BTSIDSTRING COLUMN IN NOR_CFG_RNCTAB_DOM_TAB TABLE NEEDS TO BE CHANGED FROM 30 TO 90
valnt00079283/ IZ44685 /PMR 79082,005,000	EVDO REPORTS FAIL WITH ORA-01445 INTEGER OVERFLOW
valnt00079644 / IZ44830 /PMR 84368,999,000	EVDO TEMPLATE REVA_SINGLEUSERTX_FORMATS_R4.0 PEGS NOT LOADING
valnt00080365 /IZ45403/PMR02110,999,000	CPDS BSC DATA FILES ARE LOADING INTO THE WRONG BSC IDENTIFIER
valnt00063455/ IZ35531/PMR21529,370,000	Negative values seen for 4 EVDO peg counts when a rollover scenario happens.This happens for ForwardRlpBytes and ReverseRlpBytes at DO_RNC level and ForwardRlpBytesSlot and ReverseRlpBytesSlot at DO_RNC_Card entity level.
valnt00081085/IZ46075/PMR01745,999,000	BH UPDATE FAILS WITH ORA-00001 UNIQUE CONSTRAINT ERROR (Due to the duplicate instance_id for the table NOR_TF_BSS_MDP_FNAME_TAB)

5 Known Problems

5.1 R16.2 upgrade causes summation job failure with an error about NOR_TF_MSC12_TAB. [valnt00074508]

398654|04:42:42|04:42:42|NOR_TF_MSC12_TAB::ORA-00942: table or view does not exist

Description: The summary job fails because the NOR_TF_MSC12_DXC and NOR_TF_MSC12_DXS do not get created as part of the RP16.2 upgrade. The error has been determined to be a core issue that is expected to be fixed in a Core patch soon.

Impact: The summary job may take longer to complete.

Workaround: Please contact product support for a workaround or core patch to fix this issue

5.2 Applying the R16.3 upgrade on an existing Core 8.0.6 system causes Source Section, Source Field and Version to become blank in the client for existing fields [valnt00082541]

Description: The source section, source Field and version show the information for a certain counter such as the section of the datafile it comes from, the field within that section and the technology versions it pertains to. If RP16.3 upgrade is applied on top of a Core 8.0.6 system or if Core 8.0.6 is applied later – this information is no longer present in the client/Pweb

Impact: Source section, source Field and version are blank in the client/Pweb

Workaround: Please contact product support for a workaround or core patch to fix this issue. Customers can also use the PDR to get this information.

5.3 Lab and simulated EVDO 8.0 data used for RP16.3 testing [valnt00081303]

Description: For testing of the EVDO 8.0 new counters, the QA team used some lab data and simulated data as well.

Impact: None

Workaround: Not applicable.

Known issues prior to RP16.3 release

5.4 RP16.2: Two Summarizer running at one time in RP16.2 [valnt00060032]

Description: Two Summarizer was running simultaneously when looking at the ps-mgr watch. However, this was not reproducible and was only observed once.

Impact: None.

Workaround: None.

5.5 RP16.2: Running report type as graph with graph template returns error in the Status Monitor in RP16.2 [valnt00060532]

Description: An error will appear in the Status Monitor when trying to run the report type as graph with an empty graph template included in the report definition

Impact: Status Monitor returns an error. Report is not generated

Workaround: None.

5.6 ORA- errors related to SUMM_SESSION found in bdump directory [SEAd69526]

Description: Orphaned summation jobs may produce ORA- errors such as below. These jobs are from RP15.3 release.

```
ORA-12012: error on auto execute of job 7917
ORA-06550: line 1, column 96:
PLS-00306: wrong number or types of arguments in call to 'SUMM_SESSION'
ORA-06550: line 1, column 96:
PL/SQL: Statement ignored
```

Impact: No impact to working of the Prospect system. Oracle trace files will contains this error periodically.

Workaround: Stop the middleware. Logon to sqlplus using:

```
sqlplus $DB_CONNECT
exec dbms_job.remove(<job_id_in_ORA-12012 error above>);
exit;
```

5.7 Discrepancies found between PerfDataRef.pdf, DD and Prospect Template Editor [SEAd69575]

Description: There are some discrepancies found between PDR, DD and Prospect Template Editor for entity name, Description and Source Section fields.

Impact: The information is not matched if user is trying to compare those fields mentioned above.

Workaround: None.

5.8 Runtime error message pop-up when trying to generate report with Suppressed Header for MSC entity [SEAd69576]

Description: There is a runtime error message pop-up when user trying to generate report with Suppressed Header for MSC entity. However, the report was generated successfully.

Impact: None.

Workaround: None.

5.9 Typo errors and broken links found in some technical publications [SEAd69611]

Description: Some typo errors and broken links were found in the technical publications, i.e. AdminGuide.pdf, Expressions.pdf, OpenInterface.pdf, InstallGuide.pdf, SizingTool.pdf, UsersGuide.pdf, ServerPrep.pdf and DA_Tools.pdf.

Impact: Some links will not work in the affected technical publications.

Workaround: None.

5.10 ORA-00060: deadlock detected while loading ppc_sta data in RP15.3 release [SEAd69529]

Description: ppc_sta data load could throw out ORA-00060 deadlock error when two or more data files for the same MSC are loaded simultaneously.

Impact: The deadlock error message will be displayed in loader log file.

Workaround: Reload the data by copying the data files into ftpIN/MTXnn/in directory, where nn is the supported releases e.g. 12, 13, 14 and 15.

5.11 pm_weekly takes longer time as time progress [SEAd69523]

Description: pm_weekly takes longer to complete.

Impact: Slow loading.

Workaround: Please call product support for a script to fix the problem.

5.12 Performance degradation during preparsing of RNCpm files in RP16 [SEAd69658]

Description: The preparsing process for RNCpm files takes longer to complete, about 10% slower in RP16.

Impact: Slower preparsing process for RNCpm files.

Workaround: None.

5.13 Loading of EVDO 3.0 template ResourceAllocationPerfByRNC and EVDO 4.0 template RNC_ResourceControl both in the same file will cause counters to be overwritten

Description: The reason for this problem is that the following nine counters have moved from the ResourceAllocationPerfByRNC_R3.0 (frequency 15 min) to RNC_ResourceControl_R4.0 (frequency 30 min and supported in RP16). It is recommended that you use the RNC_ResourceControl if you are on EVDO 4.0 or older version. If you are using EVDO 3.0 for ALL the RNCs in the EMS then it is ok to have ResourceAllocationPerfByRNC collected. Both the templates should **not** be collected for the same RNC.

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Counters moved

```

numRnHomedCurRnc
totalHwIdToUatiRequests
totalImsiToUatiRequests
totalSessionCloseDueToDuplicateImsi
totalUatiAllocated
totalUatiAllocatedCur
totalUatiRequests
totalUatiToHwIdRequests
totalUatiToImsiRequests

```

Workaround: The customer can comment out this template from the DAT file as shown below.

Logon as flexda on your DA box. (Data Acquisition)

```
cd ~/patches.DA_6.0_NortelRP14_Patch01
```

“vi” the templateFile and comment out the above template

“ResourceAllocationPerfByRNC_R3.0 “. There is no need to recycle the DA processes.

5.14 Issues with Stored & Non-stored BH Reports when SOW is not set to default [SEAd61130]

Description: The stored busy hours uses the system default Start OF Week where as the non-stored uses the SOW (Start Of Week) set up in the Client.

Impact: Stored and Non-stored busy hour reports do not match-up.

Workaround: Do not change the StartOfWeek value from the default one.

5.15 Data Availability tool is displaying "Loaded" status for some datatypes but data is not in the database as a result of past_part_maint settings and pm_daily [SEAd61079]

Description: The Data Availability tool is displaying "Loaded" status for some datatypes (MTXCFG,BSC,MCBTS,SBSC,MSC,MGNTM,USP) but data is not present in database as the past_part_maint settings cause the data to be purged by the pm_daily nightly job.

Impact: This could cause confusion to the user when a report returns no data however the Data Availability shows data as being present

Workaround: None

5.16 Confidence Report Displays Null Values [SEAd49067, SEAd50427, SEAd54999]

Description: Confidence reports might display null values under certain conditions.

Impact: Some values in Confidence reports might display as null.

Workaround: None.

5.17 Some fields are incorrectly defined in CAP LOG [SEAd62194]

Description: Fields CAP101_CATMPHR[1-15] and CAP101_ENGCATMP[1-15] will not show correct values in MTX13/MTX14 reports.

Impact: Fields CAP101_CATMPHR[1-15] and CAP101_ENGCATMP[1-15] will not show correct values when reports are run against data that is MTX13 or MTX14.

Workaround: UDCs can be created to generate the values as follows:

```
CAP101_CATMPHR1_UDC = vsum (CAP101_CATMPHR1, CAP101_CATMPDHR1,
CAP101_CATMPVHR1, 0),
CAP101_CATMPHR2_UDC = vsum (CAP101_CATMPHR2, CAP101_CATMPDHR2,
CAP101_CATMPVHR2, 0), and so on.
```

```
CAP101_ENGCATMP1_UDC = vsum (CAP101_ENGCATMP1, CAP101_ENGCATMPD1,
CAP101_ENGCATMPV1, 0),
CAP101_ENGCATMP2_UDC = vsum (CAP101_ENGCATMP2, CAP101_ENGCATMPD2,
CAP101_ENGCATMPV2, 0), and so on.
```

5.18 EN_EVENT tables could gets huge due to large number of events and causes event_clean process to hang

Description: Sometimes the en_event table will get huge in production boxes and will cause the event_clean process to hang.

Workaround: This table can be manually purged using the following commands. Logon as flexpm user and run the following commands.

```
sqlplus $DB_CONNECT
alter table EN_EVENT_DATA_LOAD disable constraint FK_EN_EVENT_DATA_LOAD;
alter table EN_EVENT_FILE_LOAD disable constraint FK_EN_EVENT_FILE_LOAD;
alter table EN_EVENT_FILE_MISSING disable constraint
FK_EN_EVENT_FILE_MISSING;
alter table EN_EVENT_STATUS_CHANGE disable constraint
FK_EN_EVENT_STATUS_CHANGE;
alter table EN_EVENT_SA_FILE_MISSING disable constraint
FK_EN_SA_FILE_MISSING;

truncate table EN_EVENT_DATA_LOAD;
truncate table EN_EVENT_FILE_LOAD;
truncate table EN_EVENT_FILE_MISSING;
truncate table EN_EVENT_STATUS_CHANGE;
truncate table EN_EVENT;

alter table EN_EVENT_DATA_LOAD enable constraint FK_EN_EVENT_DATA_LOAD;
alter table EN_EVENT_FILE_LOAD enable constraint FK_EN_EVENT_FILE_LOAD;
alter table EN_EVENT_FILE_MISSING enable constraint
FK_EN_EVENT_FILE_MISSING;
alter table EN_EVENT_STATUS_CHANGE enable constraint
FK_EN_EVENT_STATUS_CHANGE;
alter table EN_EVENT_SA_FILE_MISSING enable constraint
FK_EN_SA_FILE_MISSING;
exit;
```

5.19 Running healthcheck shows incorrect OS required [SEAd66920, SEAd69277, SEAd69229]

Description: It looks like running healthcheck displays incorrect OS.

Impact: This could cause confusion to the user.

Workaround: None

5.20 Excel Report misaligned in Traffic Report for the entity Sector [SEAd66930]

Description: Prospect Client report generated for entity Sector (populated by SDMcsv datafile) produce a misaligned report. The field name at not properly aligned to fit all character.

Impact: None.

Workaround: Expand the excel column to view the whole column content.

5.21 Report Scheduler throws non-user-friendly message [SEAd67061]

Description: Report Schedules when saved with EndDate earlier than the first scheduled day throws non-user-friendly message.

Impact: Report scheduler cannot be saved.

Workaround: Save without "check" the EndDate or save with EndDate later or similar to the first scheduled.

5.22 Some Event Notifications are not Triggered [SEAd41935]

Description: The busy hour clean success event notification is not triggered.

Impact: E-mail event notification functionality is not complete.

Workaround: None.

5.23 Stored Busy Hour Reports Fail for Last Interval of the Day [SEAd41961]

Description: Stored busy hour reports fail for the last interval of the day (23:45). This is observed for the entity interface and might be an issue for other entities as well. The non-stored busy hour report works correctly.

Impact: Stored busy hour reports fail for the last interval of the day (23:45).

Workaround: None. Users can use the Non-Stored Busy Hour report for specific cases.

5.24 DA tool in report editor returning inconsistent info [SEAd63714]

Description: DA tool in report editor is sometimes inaccurate.

Impact: Inconsistent information.

Workaround: None.

5.25 Fields for which "show" button set off in template are not shown in regular output but do show on graph (should not) [SEAd58948]

Description: In the report result, the fields with "show" attribute set off should not be displayed in the excel report both in values and also in graph.

Actual Results:

The fields for which the "show" button set off are not shown in the report values but are shown in the graph

Impact: Report and graph show different results.

Workaround: Report is correct.

5.26 Running the script `add_filetype_timeout.sh` is not recommended

Description: This is a performance issue with `add_filetype_timeout.sh` script. It is not recommended to be used for checking the data file if it does not arrive as expected.

Impact: If used, user will have to wait for a very long period of time due to the resetting scheduler tables as the script increases time to clean up schedule table once the middleware started. The following error message will be displayed in `wmtm` log)

```
wmtm: 2007-10-23 15:06:42: Resetting scheduler tables (clean_tm_tables)...
2007-10-23 23:08:09: An error occurred running a query on behalf of a childtask
process:
XML Query: <PROCEDURE Name='clean_tm_tables' />
Error: Exception : [SERVERERROR]
ORA-01555: snapshot too old: rollback segmentnumber 4 with name "_SYSSMU4$" too
small ORA-06512: at "NORG30.XPT", line 1377
ORA-06512: at "NORG30.CLEAN_TM_TABLES", line 120 ORA-06512: at line 1
Originator: Database (Oracle)
Code      : 1555
Trace     : XMLFromQuery::fetchXML()
Context   : executing Oracle stored proc: clean_tm_tables
Snippet of wmtm.log.2007.10.25:
```

Workaround: None

6 Upgrade Installation Instructions

The following instructions are for install of Prospect® 8.0 for Nortel AMPS/TDMA/CDMA MTX16 RP16.3. For further information consult the *Prospect Installation Guide*.

6.1 Check Prerequisites

Please see the Table in Section 2 for the prerequisites. Please note the Prospect / Core and the JDK version to make sure they are correct.

Note: To install the Oracle 9.2.0.8 DST patch on an existing Solaris 10 system, the following command need to be used:

```
$ runInstaller -ignoreSysPrereqs
```

6.1.1 Baseline and Patches Requirements

Important Note: The RP16.3 upgrade is a cumulative upgrade that contains RP16 (along with Core 8.0.5), RP16.1 (MTX16/NBSS16 specific) and RP16.2 (EVDO7 specific) and RP16.3 (EVDO8 specific) upgrade changes. That means RP16.3 upgrade can be applied against an existing RP15.3 system, RP16 system, RP16.1 system or against a RP16.2 system. The `wminstall` command will detect if you have a RP15.3 system and if so it will apply RP16, RP16.1 and RP16.2 and RP16.3 upgrades. If `wminstall` detects a RP16 system already, it will install RP16.1, RP16.2 and RP16.3 . If `wminstall` detects a RP16.1 system already, it will install RP16.2 and RP16.3 . If `wminstall` detects a RP16.2 system already, it will just apply RP16.3 specific upgrade changes. Since these upgrades could take a while, please ensure that there are no cron jobs or backup software accessing the Prospect database for the duration of the upgrade.

The base environment that this patch will be applied against:

1. Prospect 6.0.6 Nortel MTX12 Base Release (**UPGRADE PATH**):
 - Prospect 6.0.6 Nortel MTX12 base release
 - Prospect 7.2 Nortel MTX12_Patch01
 - Prospect 7.2 Nortel MTX12_Patch02
 - Prospect 7.2 Nortel MTX12_Patch03
 - Prospect 7.2 Nortel MTX12 RP7.3
 - Prospect 7.2 Nortel MTX12 RP8a
 - Prospect 7.2 Nortel MTX12 RP8b
 - Prospect 7.2 Nortel MTX12 RP8c
 - Prospect 7.2 Nortel MTX13 RP9
 - Prospect 7.2 Nortel MTX13 RP9a
 - Prospect 7.2 Nortel MTX13 RP9a HF01
 - Prospect 7.2 Nortel MTX13 RP9a HF02
 - Prospect 7.2 Nortel MTX13 RP9a HF03
 - Prospect 7.2 Nortel MTX13 RP9b (optional)
 - Prospect 7.2 Nortel MTX13 RP10
 - Prospect 7.2 Nortel MTX13 RP10 HF01
 - Prospect 7.2 Nortel MTX13 RP10 HF02
 - Prospect 7.2 Nortel MTX13 RP10 HF03
 - Prospect 7.2 Nortel MTX13 RP10 HF04

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- Prospect 7.2 Nortel MTX13 RP10 HF05
 - Prospect 7.2 Nortel MTX13 RP10 Patch10
 - Prospect 8.0 Nortel MTX13 RP11
 - Prospect 8.0 Nortel MTX13 RP11 Patch10
 - Prospect 8.0 Nortel MTX14 RP12
 - Prospect 8.0 Nortel MTX14 RP12 HF01
 - Prospect 8.0 Nortel MTX14 RP12 HF02
 - Prospect 8.0 Nortel MTX14 RP12 HF03
 - Prospect 8.0 Nortel MTX14 RP12 HF04
 - Prospect 8.0 Nortel MTX14 RP12 HF05
 - Prospect 8.0 Nortel MTX14 RP13
 - Prospect 8.0 Nortel MTX14 RP13 HF01
 - Prospect 8.0 Nortel MTX14 RP14
 - Prospect 8.0 Nortel MTX14 RP14 HF01
 - Prospect 8.0 Nortel MTX14 RP14 HF02
 - Prospect 8.0 Nortel MTX14 RP14 HF03
 - 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 (**See important note above**)
 - Prospect 8.0 Nortel MTX15 RP16 HF01 (Optional)
 - Prospect 8.0 Nortel MTX16 RP16.1
 - Prospect 8.0 Nortel MTX16 RP16.2
2. Prospect 8.0 Nortel MTX13 RP11 Base Release (**FRESH INSTALL PATH**):
- Prospect 8.0 Nortel MTX13 RP11 Fresh 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 RP12 HF01
 - Prospect 8.0 Nortel MTX14 RP12 HF02
 - Prospect 8.0 Nortel MTX14 RP12 HF03
 - Prospect 8.0 Nortel MTX14 RP12 HF04
 - Prospect 8.0 Nortel MTX14 RP12 HF05
 - Prospect 8.0 Nortel MTX14 RP13
 - Prospect 8.0 Nortel MTX14 RP13 HF01
 - Prospect 8.0 Nortel MTX14 RP14
 - Prospect 8.0 Nortel MTX14 RP14 HF01
 - Prospect 8.0 Nortel MTX14 RP14 HF02
 - Prospect 8.0 Nortel MTX14 RP14 HF03
 - 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 (**See important note above**)

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- Prospect 8.0 Nortel MTX15 RP16 HF01 (Optional)
 - Prospect 8.0 Nortel MTX16 RP16.1
 - Prospect 8.0 Nortel MTX16 RP16.2

3. Prospect 8.0 Nortel MTX15 RP15.1 Base Release (**FRESH INSTALL PATH**)

- Prospect 8.0 Nortel MTX15 RP15.1 Fresh Install
- 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 (**See important note above**)
- Prospect 8.0 Nortel MTX15 RP16 HF01 (Optional)
- Prospect 8.0 Nortel MTX16 RP16.1
- Prospect 8.0 Nortel MTX16 RP16.2

4. Prospect 8.0 Nortel MTX15 RP15.2 Base Release (**FRESH INSTALL PATH**)

- Prospect 8.0 Nortel MTX15 RP15.2 Fresh Install
- Prospect 8.0 Nortel MTX15 RP15.3
- Prospect 8.0 Nortel MTX15 RP15.3 Patch10 (Optional)
- Prospect 8.0 Nortel MTX15 RP16 (**See important note above**)
- Prospect 8.0 Nortel MTX15 RP16 HF01 (Optional)
- Prospect 8.0 Nortel MTX16 RP16.1
- Prospect 8.0 Nortel MTX16 RP16.2

5. 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 (**See important note above**)
- Prospect 8.0 Nortel MTX15 RP16 HF01 (Optional)
- Prospect 8.0 Nortel MTX16 RP16.1
- Prospect 8.0 Nortel MTX16 RP16.2

6. Prospect 8.0 Nortel MTX15 RP16.0 Base Release (**Fresh Install PATH**)

- Prospect 8.0 Nortel MTX15 RP16 Fresh Install
- Prospect 8.0 Nortel MTX15 RP16 HF01 (Optional)
- Prospect 8.0 Nortel MTX16 RP16.1
- Prospect 8.0 Nortel MTX16 RP16.2

Important! *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.*

6.1.2 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.

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: 1GB
- TRAFFIC_LARGE: 500MB
- TRAFFIC_MEDIUM: 300MB
- TRAFFIC_SMALL: 100MB
- WM_FLEXP: 50MB

Note: It is recommended to always keep 10% of total table space size available for each table space in the Prospect system

6.1.3 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
```

6.1.4 Oracle version

It is **highly** recommended that the Oracle version on the Prospect server is either 9.2.0.8 or 10.2.0.3. Other versions are not supported. The `wminstall` preview command will check for these specific versions and will throw out warnings if this check fails.

6.1.5 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 should not proceed.

Here are the steps to verify and install Perl 5.6.1 if needed.

Step 1: To determine the version of Perl

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1. Find out which version of Perl is installed by entering the following command:

```
$ /usr/bin/perl -v
```

2. If you see 5.6.1 then you can proceed to Step 2: Verifying/Creating Perl installation directory and Symbolic links.

3. If you see a version other than 5.6.1, then first check to see if Perl 5.6.1 is installed. Run the following command to determine this.

```
$ ls /usr/perl5/5.6.1
```

If the above command produces no error, then proceed to Step 2.

If the above directory does not exist, then you need to install Perl 5.6.1 from the standard Perl website. Perl is not included in Prospect iso image. After the install, run the above command to make sure the install went ok. Then proceed to the Step 2 about Creating Symbolic Links to Perl Directory

Step 2: Verifying/Creating Symbolic Links to the Perl Directory

The following steps verify and create symbolic links to the Perl directory. You will need the “root” user password to make links.

1. Determine the current location of Perl. This is normally `/usr/bin/perl`. Identify the directory where Perl is located by entering the following command:

```
$ whereis perl
```

You should see `perl:/usr/bin/perl /usr/local/bin/perl`

If you see other directories then you will still need to go through the steps below.

2. Determine whether `/usr/bin/perl` is a symbolic link to the correct Perl directory:

```
$ ls -lrt /usr/bin/perl
```

This should point to the directory `/usr/perl5/5.6.1/bin/perl`.

If it does not, then:

Log on as root, and change to the `/usr/bin` directory.

```
[root] $ cd /usr/bin
[root] $ rm -f perl
[root] $ ln -s /usr/perl5/5.6.1/bin/perl perl
```

6.2 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.

6.3 Pre-Installation Instructions

6.3.1 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.

6.3.2 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. That way there is no loss of Prospect. For more details please refer to the Admin Guide.

6.3.3 Warning: 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 RP16.3 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.

6.3.4 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
```

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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.

6.3.5 Information Check and Pre-Installation Setup

The following instructions must be executed on the Prospect server:

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 16.0.16.3-TIV-PROSPECT-NORCDM-FP0000.tar
```
6. Run the following shell script to backup existing `.profile` files into `$FLEXPM_HOME/patches/16.0.16.3.0.2/Profile_backup_prior_RP16.3`

```
[flexpm] $ cd sun-server-1/WMInstall
[flexpm] $ ./pre_wminstall.sh
End with "Pre-wminstall completed at.."
```

7. Read the license agreement in licence.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/WMIInstall 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/WMIInstall 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
```

8. 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

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. (Note that all parameters should be in the same line)

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

```
[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. (Note that all parameters should be in the same line)

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

Notes about wminstall return codes

- Note1 : 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.

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```
[flexpm] $ cd /var/tmp/INSTALL_NORTEL/sun-server-1/WMInstall/install
[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;
```

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 `check_UDC_match.ksh` (Any doubt please call IBM customer support to confirm BEFORE proceeding with the upgrade). Once satisfied that all UDCs were renamed, run the `check_UDC_match.ksh` one more time to make sure the script does not output any UDCs.

```
SQL> exit;
```

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

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

Important! *Uninstallation of this upgrade is not supported. A complete system back up is recommended before installing this upgrade.*

- Note 2: 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. Then a Oracle 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/install
[flexpm] $ check_db_lock.sh 2
```

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

- **Note 3:** 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
```

6.4 Installation Instructions

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.**

- 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
```

- On the Oracle database server create the required mount point

```
[root] $ mkdir -p /u01/apps/WatchMark/FlexPM/NorCDMA
```

- 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
```

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

- Log off the database server. You can proceed with the upgrade.

Installation Steps

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
```

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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. (Note that all parameters should be in the same line)

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

If the `FLEXPM_HOME=/u01/apps/WatchMark/FlexPM/NortelMTX` then use the following command to start the install. (Note that all parameters should be in the same line)

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

Note: 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 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.**
5. Copy the `preParse1x.pl` from the Prospect software directory to the following directory

```
[flexpm] $ cp /var/tmp/INSTALL_NORTEL/sun-server-
1/WMInstall/preParse1x.pl $PROSPECT_HOME/1xEVDO/scripts
```

6. 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>` for any error messages.

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

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```
$ cd $PM_HOME/audit/<YYYY>__<MM>__<DD>__<HH>__<MM>__<SS>/
$ egrep -i 'warning|error|fail|ora-|sp2-|pls-' detail.log >
check_detail.log
Examine check_detail.log to make sure there are no serious errors.
```

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
```

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

```
[flexpm] $ show_installed

COMPONENT                                INSTALL_TY  INSTALL_DATE
-----
CORE Prospect rev 8.0.5.0 b8             UPGRADE    08-MAR-03 12:06:47
VENDOR NortelMTX16 rev 16.0.16.3.0 b2    UPGRADE    09-FEB-26 23:17:55
```

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.

8. Log off as *flexpm*.

6.5 Post-Installation Instructions

6.5.1 Re-resource the profile

1. Login as *flexpm*, if not already logged in.
2. Source the *.profile* in *FLEXPM_HOME*

```
[flexpm] $ . ./profile
```
3. If customer's database server IP address is different from the Prospect server IP Address (i.e. customer has split Server configuration), then the following variable needs to be set in *\$FLEXPM_HOME/vendor/Nortel/.profile.vendor*

Open the above file using the 'vi' or other unix based editor.

```
[flexpm] $ vi $FLEXPM_HOME/vendor/Nortel/.profile.vendor
```

Search for *DB_HOSTIP*. If NOT exist please add the line below at the bottom of the file. The IP Address of the Database server should be in the quotes.

```
eg. export DB_HOSTIP="nnn.nnn.nnn.nnn"
```

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Save the file and exit the editor. Bounce the middleware.

4. This step is not needed if you have EVDO loading already setup for the prior Prospect release. However if this is the first time you are loading EVDO data then go ahead and setup the `crontab`.

Setting up of cron job for `callPreparse.sh`. The cron job can be scheduled to run every 5 minutes, or every 10 min, every 15 min or every 30 minutes. The default interval is 30 min. The script `gen_EVDO_cron.pl` can be run from any directory as long as you are logged in as 'flexpm' user.

To generate cron entries each 5 min use

```
gen_EVDO_cron.pl -i 5 > out
```

To generate cron entries each 10 min use

```
gen_EVDO_cron.pl -i 10 > out
```

To generate cron entries each 15 min use

```
gen_EVDO_cron.pl -i 15 > out
```

To generate cron entries each 30 min use

```
gen_EVDO_cron.pl -i 30 > out
```

Note: This information is unchanged from the prior release. There was a script that will help generate cron job entries. Also, the `callPreparse.sh` job takes an argument `RNCNAME`. The `RNCName` is the name of the RNC as defined in the `$PROSPECT_HOME/msc_list`

If you view the out file, it will have entries for each RNC at the specified intervals. You can use the "out" file above and edit the `crontab` using "`crontab -e`" and cut and paste entries from "out".

The frequency of cron job depends on the number of RNCs and the load on the box. Typically, scheduling the `callPreparse.sh` to 3 min and 33 minutes after the hour should be sufficient to pick up all files. But if you notice that the load on the box is very high between 0- 15 min and 30- 45 min after the hour, you may want to schedule `callPreparse.sh` to 4 times in an hour (Interval = 15 min).

5. This step is not needed if you have EVDO loading already setup for the prior Prospect release. However if this is the first time you are loading EVDO data then go ahead and setup the `PREPARESE_LIMIT` environment variable.

Setting up the `PREPARSER_LIMIT`. This is the number of `callPreparse.sh` scripts that can run simultaneously.

E.g. if you have 8 RNCs in `msc_list`, and a 4 CPU box, then you would want a load of about 4 or 5 on the box. That would mean you want about 4 to 5 `callPreparse.sh` at any given time to be running. Set the `PREPARSER_LIMIT=5` using the following `set_evdo_option` command

```
[flexpm] $ set_evdo_option pp=5
```

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Note: The value of the `PREPARSER_LIMIT` is really determined by CPU speed, load on the box and `MAX_COMMANDER` value as well. e.g if `MAX_COMMANDER=16` on a 20 CPU box, then you would want at least 16 `callPreparse.sh` processes to be preparing at any given time. But at the same time, you would not want more than 20 processes. That means `PREPARSER_LIMIT` could be between 16 and 20.

`PREPARSER_LIMIT` can be changed at any time depending on machine load. There is no need to bounce sentry after making this change. The default value of the `PREPARSER_LIMIT` is 10.

Important: Verify that there is no error after the installation.

If there are errors about “Error:Template <nnn> not recognized” in the loader logs, after the upgrade when the `callPreparse.sh` is run, you may need to update the `templateFile` with the backup from prior release. (See the `templateFile.Before_RP16.3`) Please work with product support on that if needed.

6. This step is needed only if you have changed your `msc_list` manually just before or after the upgrade. Check to make sure that the `$PROSPECT_HOME/msc_list` does not have any lines with any missing fields. That means each line in the `msc_list` should have the following

```
NE_NAME   SYS_ID           NE_ID           BSS   Prefix   NEType
```

Also make sure that there is only one header line in `msc_list`. If you see 2 lines in the `msc_list` with `ne_name` or `msc_name`, remove the `msc_name` line. Run the following command to make sure the `msc_list` is formatted correctly:

```
[flexpm] $ addmsc.sh -remake
```

7. Remove the scratch directory where you un-tar'd the software. (.e.g `/var/tmp/INSTALL_NORTEL`)
8. Start the middleware.

```
[flexpm] $ ps-mgr init
```

6.5.2 Configure Retention Period Settings [SEAd69879]

During the upgrade, some of the retention period may be reset back to ‘Unlimited’. This can be reconfigured as follows:

1. Compare the output of `past_part_maint.sh` against the original values recorded in `past_part_maint.bak` (Refer to Section 6.3.5 step 4).
2. If any values are different, please change it back to the original values using the following command. E.g. if “traffic”:

```
[flexpm]$ past_part_maint.sh <class type> <original value>
```

Example:

```
[flexpm]$ past_part_maint.sh traffic 10
```

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(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.

6.5.3 Enable server access in Prospect Web

If you disabled access to the Prospect server from Prospect Web in step 5.3.2, then use the admin tool to re-enable access to the corresponding data source in Prospect Web.

6.6 Uninstallation 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.

7 Useful Hints

7.1 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.

```
[flexpm] $ sqlplus $DB_CONNECT
SQL> update schedule set next_time=next_time , needs_msg_update='Y'
where period not in ('I','O') and job_type != 10
and nvl(end_time,systdate+1) >= sysdate;

SQL> commit;
```

7.2 Preparing error “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 fields. 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_PerfBySecondarySec
torCarrier_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.

7.3 Obsolete pegs in RP16

If you see the following error message while trying to open a report template that contains obsolete or hidden pegs in RP16, this is expected behaviour.

```
"One or more fields in this template are no longer valid"
```

If you run a report with obsolete or hidden pegs included, it will run and report as normal. However, the headers of obsolete pegs will be marked as “OBSOLETE” in the report generated.

If you try to edit a template with hidden fields, it will remove them from the template, but the change does not take effect until you save the template. You can still add hidden fields to UDC expressions and they will be evaluated as if they were not hidden.

7.4 Prospect Client/Server Compatibility

The Prospect client is backward compatible with older Prospect servers. If you try to use an older client with newer server, the results are undefined.

7.5 Prospect Single Client

This release features a single, uniform client for all vendor versions.

Users of the Prospect system have expressed the need to connect to all their Prospect servers with a single client. Several customers have installed multiple Prospect servers, which cover several different vendor technologies. Two key benefits to the single client are:

- Reduced number of clients that your IT department need to install
- Reduced confusion among users over which Prospect client should be used with which Prospect server.

The single Prospect client supports Prospect servers co-released with the client and a defined number of server versions released before the client. Prospect servers released after the client are not supported (that is, the Prospect client is not forward-compatible). Contact your IBM customer support representative to identify the server versions that your client supports.

This feature removes support for two or more Prospect clients installed on the same PC. Side-by-side installations were originally supported because the Prospect client was not backward compatible with older versions of the server. Full support for backward compatibility removes the need for side-by-side support.

7.6 Ports Used by the Prospect Client

The Prospect client uses two ports to connect to the Prospect server:

- **FX port** — Most queries from the Prospect client, status monitor, Auto Downloader, and DSMonitor (DSMonitor is a process that registers for updates from the DataServer) use this port. By default the FX port number is the base port plus four (4). For example, if the base port is 6440, the FX port would be 6444.
- **Event port** — DSMonitor and Prospect Alarm use this port. By default the Event port number is the base port plus three (3). For example, For example, if the base port is 6440, the Event port would be 6443.

If you have closed the ports required by the Prospect client for security reasons, or if you are using these ports for other services, you need to either re-open or re-assign them to the Prospect FX and Event ports. Otherwise, the ability for the Prospect client to be able to communicate with the Prospect server is compromised.

To determine which port numbers are required for your system, log on as `flexpm` and run the following commands:

```
[flexpm] $ echo $FX_DS_PORT
```

```
[flexpm] $ echo $EVENT_PORT
```


8 Customer Support

Contact IBM customer support at prospect@us.ibm.com if a problem is encountered during the installation of this release.

9 Manifest

The manifest of files contained within this release is in the `root` directory on the Prospect server CD. It is called `manifest.txt`.

Appendix A

For AFT customers, the key values to be used are mentioned below.

```
#
# Supported Nortel CDMA/TDMA/AMPS Switch OM Groups Description
#
# The parser uses descriptions in this file to format OM group
# data records. Formatted OM group records are output if and
# only if data is encountered for the group, and there is a valid
# entry for the group in this file.
#
# Name          Key    ICP-Skew
#
ANN             1      0
BRSTAT          0      0
C7LINK1         1      0
C7LINK2         1      0
C7LINK3         1      0
C7LKSET         1      0
C7ROUTE         1      0
C7RTESET        1      0
CALLMIX         0      0
CAUARSCT        1      0
CAUAUTH         1      0
CAUCPFRQ        1      0
CAUCPSCT        1      0
CAUCPSYS        1      0
CAUDAT3G        1      0
CAUDATSC        1      0
CAUDATSY        1      0
CAUFRQ3D        1      0
CAUFRQ3V        1      0
CAURM           1      0
CAUSCT3D        1      0
CAUSCT3V        1      0
CAUXTFRQ        1      0
CAUXTF3D        1      0
CAUXTF3V        1      0
CDMAIVSN        1      0
CDMAOAM         0      0
CDMAPDOM        0      0
CDMAPDSO        0      0
CDMAPGZN        0      0
CDMAVSO         1      0
CDSNMQRY        1      0
#
## 12/10/2002 -- Comment out these groups with known loader issue for CDMA
## systems until the issue can be resolved. TDMA/AMPS systems can safely
## uncomment these groups, because the issue only affects CDMA systems.
#
CIBEROM         1      0
```

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CIBEROM2	1	0	
CIUPROST	1	0	
CP	1	0	
CPUSTAT		0	0
DCCICPCP	1	1	
HODACNTR	1	0	
HODCCNTR	1	0	
ICPAUTH		1	1
ICPBER		1	1
ICPCA	1	1	
ICPCELTR	1	1	
ICPCP	1	1	
ICPCP2		1	1
ICPDCP		1	1
ICPDFC		1	1
ICPDHO		1	1
ICPFC	1	1	
ICPHO	1	1	
ICPHO2		1	1
ICPSMS		1	1
ICPSMS2		1	1
ICPOVLD		0	1
ICPOVLD2	0	1	
LPICHUSG	1	1	
#			
##	12/10/2002 -- Comment out groups with known loader issue for CDMA		
##	systems until the issue can be resolved. TDMA/AMPS systems can safely		
##	uncomment these groups, because the issue only affects CDMA systems.		
#			
#	MAHOCAND	1	0
#	MAHOCMPT	1	0
#	MASUMCAN	1	0
#	MASUMSRV	1	0
	MPICHUSG	1	1
	MTXDCELL	1	0
	MTXHLLR		0
	MTXNWKIC	1	0
	MTXNWKOG	1	0
	MTXOVLD		0
#			
##	12/10/2002 -- Comment out groups with known loader issue for CDMA		
##	systems until the issue can be resolved. TDMA/AMPS systems can safely		
##	uncomment these groups, because the issue only affects CDMA systems.		
#			
	MTXPC1	1	0
	MTXPC2	1	0
	MTXPC3	1	0
	MTXPC4	1	0
	MTXPC5	1	0
	MTXPC6	1	0
	MTXPC7	1	0
	MTXPC8	1	0
	MTXSMS	1	0

```

    MTXSYS1          0      0
    MTXSYSX          0      0
#
## 12/10/2002 -- Comment out groups with known loader issue for CDMA
## systems until the issue can be resolved. TDMA/AMPS systems can safely
## uncomment these groups, because the issue only affects CDMA systems.
#
#    MTXZONPG        0      0
    NWKIC2           1      0
    NWKIC3           1      0
    NWKICX           1      0
    NWKOG2           1      0
    NWKOG3           1      0
    NWKOGX           1      0
    OFZ              0      0
    OFZ2             0      0
    OMMTX            1      0
    OMMTX2           1      0
    OMMTX3           1      0
    OMMTXHO          1      0
    OMMTXHO2         1      0
    OMMTXSY2         0      0
    OMMTXSYS         0      0
    PM               1      0
    RMU3G            0      0
    AMA              0      0
    SLLNKINC         1      0
    SMRSICAN         1      0
    SMRSISRV         1      0
    STORE            0      0
    TLDNPOM          0      0
    TRK              1      0
    TRMTFR           0      0
    TRMTFR2          0      0
    TRMTRS           0      0
    TRMTER           0      0
    TRMTCU           0      0
    TRMTCM           0      0
    TRMTCM2          0      0
    UTR              1      0
#
# 05/27/2003 -- Added the following for MTX12 Support.
#
    LCSSYS           0      0
    MTXOMTRK         1      0
    CAUCSDCP         0      0
    CDMAPAGE         1      0
    TDPIC1           1      0
    TDPOG1           1      0
    XASTAT           0      0
#
# 03/03/2004 -- Added DS1CARR after patch 5
    DS1CARR          1      0

```

CAPACEIU	1	0
VERFYEIU	1	0
VERFYNIU	1	0
CAPACNIU	1	0
CAPACXIU	1	0
VERFYXIU	1	0
#		
# 03/23/2006 - Added per patch RP9a		
SMSZONPG	1	0
MWIZONPG	1	0
# 11/07/2006 - Added per West region request		
OMMTXHO3	1	0
OMMTXHO4	1	0
# 12/13/2006 - Added for Tech Support		
CF3P	1	1
MNBD	0	0

Appendix B

Daylight Saving Time Support (DST)

The U.S. government is changing the way Daylight Saving Time (DST) will be calculated in the United States starting in the spring of 2007. To ensure correct support of these changes we strongly recommend all Prospect installations upgrade their 3rd party software before the second Sunday in March 2007 as noted below.

Oracle 9i

All Oracle 9i installations should apply the following Oracle patch which may be obtained through Oracle support:

Version 9.2.0.6 - P5548107_92060_GENERIC.zip

Version 9.2.0.8 - P5548107_92080_GENERIC.zip

Solaris

All Solaris OS installations versions 9 and 10 should apply the following patches which may be obtained through SUN Solaris support:

Solaris 9 – 113225-03 or later and 112874-33 or later

Solaris 10 – 122032-01 or later and 119689-07 or later

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