

Release Notes

Prospect® 8.0

Ericsson GGU 6.0.14.0.0



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1 Description

Prospect® 8.0 for Ericsson GGU version 6.0.14.0.0 is an upgrade release.

- The Prospect Base version certified against this release 8.0.5.0.08.
- The client version certified against this release is 8.0.5.0.06.
- For Fresh Install, it supports platform on Sun Solaris 10, and Oracle 10.2.0.3 (32bits).
- For Upgrade install, it supports platform on both Sun Solaris 9 & 10, and Oracle 9.2.0.8 & 10.2.0.3 (64bits)

The following publications are included with this release.

Publication	File Name	Revision Date
Prospect Open Interface API	OpenInterface-API.pdf	13 May 2008
Prospect Server Preparation Guide	ServerPrep.pdf	11 June 2008
Prospect Server Sizing Tool	SizingTool.pdf	25 April 2008
Prospect User Guide	UsersGuide.pdf UsersGuide.uue	4 March 2008 28 February 2008
Expressions Technical Reference	Expressions.pdf Expressions.uue	21 February 2008 28 February 2008
Prospect Administrator's Quick Reference Card	QuickReference.pdf	29 July 2008
Prospect Installation Guide	InstallGuide.pdf	16 September 2008
Prospect Performance Data Reference	PerfDataRef.pdf PerfDataRef.uue	06 August 2008 11 August 2008
Prospect Administration Guide	AdminGuide.pdf AdminGuide.uue	29 July 2008 15 September 2008

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.

Note: All the user publications can be downloaded from *Prospect Advantage* web site.

2 Supported Platforms

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
Ericsson MSC R11, R12, R12.1
Ericsson SGSN R7.0, R8MD, R8IP
Ericsson BSC R11, R11.1, BSS06B
Ericsson RANOS P5ED, P5MD, P6, GPEH EBS-W

New Added Supported Vendor Software in this Release
(None)

3 New Features

3.1 Oracle 10g support

Prospect 8.0.5 has been enhanced to work with Oracle 10g.

3.2 Multi session summations

Prospect has been enhanced to improve the performance of weekly and monthly summation jobs.

3.3 Partition Maintenance Intelligence

The partition maintenance (`part_maint`) background process is integral to the Prospect system as it is responsible for the maintenance of all traffic table partitions. In this release it has been enhanced to give better traceability, granularity, and control over the job and its operations. It will also provide more intelligence as to sequencing the operations to be performed.

3.4 BusyHour Slice

The slice concept is an attempt to horizontally slice the table by ranges of instance ids. Since the tasks are pre-generated, an instance count threshold will be introduced to determine when the task would be sliced. When the threshold is reached, multiple tasks will be generated for the tables. These new tasks would only copy data for their range of instances allowing user to use multiple sessions on a single table. Since the tasks are processed in their generated order, the new slice tasks would be processed first.

3.5 Technology Table Space Growth CR

In this release, Prospect has the ability to set retention periods across all database tables, in groups, separated out by technology (GSM, UMTS, GPRS) per Prospect Server application. This enable user to prevent unwanted or unnecessary table space growth for the technologies that are not in use.

3.6 RANOS Topology

Prospect for Ericsson GGU RP14 changes the way in which full keys are formed in the RANOS (RNC) module. (See change requests MR0306085721 and MR0409085556.) Previous releases made assumptions about the naming conventions used by network elements, which are no longer valid. In RP14, the RANOS module derives a topology mapping from the Bulk CM data.

The topology is stored in a table called `ERC_UTRANCM_TOPOLOGY`. The Bulk CM loader extracts the topology contained in each Bulk CM file into a file whose name ends in `.topology`. There is one `.topology` file for each Bulk CM file (one per OSS, therefore). The Sentry detects these files and loads them into the database. The topology information is therefore separate from the `.cm1h` files normally produced by the Bulk CM loader, which contain the rest of the Bulk CM data. This ensures that new topology is available to the PM loader as soon as possible. The Bulk CM loader outputs the `.topology` file before the corresponding `.cm1h` file, and `.topology` files are typically much smaller than `.cm1h` files.

Once a `.topology` file has been loaded, it moves to either the `ok` or `fail` directory under `$PROSPECT_HOME/./ftpIN/RANOS/cm`, depending on whether loading succeeded or failed.

Each `.topology` file produces two log files in `$PROSPECT_HOME/./ftpIN/RANOS/cm/logs`. The first, which contains an overview, will have a name of the form `Bulk-CM-filename.process-ID.topology.CID_RNC_TOPOLOGY.date::time`. For example, `OSS2_WEST_20080507.050501_UTRAN_CM.xml.gz.7443.topology.CID_RNC_TOPOLOGY.2008-07-31::21:01:41`. The second, which gives more detail, will have a name of the form `Bulk-CM-filename.process-ID.topology.sqlldr`. For example, `OSS2_WEST_20080507.050501_UTRAN_CM.xml.gz.7443.topology.sqlldr`. It is not necessary to examine the second log file unless an error occurs.

`ERC_UTRANCM_TOPOLOGY` does not maintain any history - that is, it does not contain a timestamp column. However, old rows are not deleted as network elements are renamed or reparented. Because each Bulk CM file always contains complete topology for the relevant RNCs, most if not all of the topology will already exist in `ERC_UTRANCM_TOPOLOGY`. This means that the `.sqlldr` log file will typically contain many occurrences of the Oracle error ORA-00001 (unique constraint violated - that is, an attempt to insert a duplicate row). This is normal, and does not indicate a problem. If the only Oracle error in the `.sqlldr` log file is ORA-00001, the `.topology` file moves to the `ok` directory, not the `fail` directory.

Please note: In this delivery, the topology mapping mechanism for the RANOS module has been changed and is no longer derived from PM data files. This releases Bulk CM data for topology mapping. **After installing RP14, at least one set of the Bulk CM data has to be loaded for all the markets before loading any PM data files.**

3.7 Reset detection in RANOS remediation

Some of the counters in the RANOS module are accumulating counters. That is, their values do not reset to zero at the end of each 15-minute reporting period. Therefore, the loader must subtract the previous value of each counter from its current value to work out by how much the counter changed in the current reporting period. This process is known as remediation.

Because the counters are fixed in size (typically, they are 32-bit signed integers), they periodically reach their maximum value and wrap around to zero. The loader takes account of this - if a counter's current value is less than its previous value, the value it stores in the database is the current value minus the previous value plus the maximum value of the counter.

If many accumulating counters are less than their previous value in the same reporting period, this may indicate that the relevant network element has been reset (rebooted or restarted), such that all its accumulating counters have been set to zero, before starting to increment again. When the loader detects a reset, it loads the current values of accumulating counters into the database, without subtracting the previous value.

It is not possible to detect resets with certainty, because the PM data contains no explicit indication that a reset has happened. Therefore, the loader has to apply rules to infer that a reset has happened.

Within the loader configuration, certain accumulating counters are defined as *reset indicators*. Typically, they are counters that can be expected to increase at very different rates - for example, number of transmitted octets and number of transmitted packets. It is unlikely that both of these counters would wrap around in the same reporting period. Therefore if both of them are less than their previous value, it is likely that a reset has happened.

The loader accepts a parameter, *min-reset-counters*, that tells it how many reset indicators must be less than their previous values before the loader is to assume that a reset has happened. (The parameter is defined in the file `$PROSPECT_HOME/RANOS_loader/jloader/config.xml`, and its default value is 2.) Prior to RP14, *min-reset-counters* applied to an entire `.tar.gz` archive of PM data. If more than *min-reset-counters* reset indicators were less than their previous values, the loader assumed that a reset had happened, and that this affected all accumulating counters within the archive.

A `.tar.gz` archive may contain data from many different network elements, and so the default configuration, prior to RP14, was prone to false positives - detecting a reset when no reset had happened. This situation could be ameliorated by raising *min-reset-counters* to an excessively large value, such as one million. The loader then would be prone to false negatives - failing to detect a reset when one had actually happened.

There are two changes in RP14 to improve the accuracy of reset detection.

The first change is that the loader now detects resets within each counter group within a `.tar.gz` archive, rather than within the archive as a whole. If more than *min-reset-counters* reset indicators within a counter group are less than their previous values, the loader assumes that counter group has reset, and outputs the group's current values without subtracting the previous values. A counter group is defined as all MOIDs of a given entity within a `.tar.gz` archive.

The second change is that the Prospect administrator can now specify the required number of reset indicators as a percentage, as well as an absolute value. To do this, add the following to `$PROSPECT_HOME/RANOS_loader/jloader/config.xml`, at the same level as *min-reset-counters*.

```
<property>
  <name>min-perc-reset-counters</name>
  <value>x</value>
</property>
```

Where *x* is the required percentage. Note that only integer values are permitted.

There is no default for *min-perc-reset-counters*. If it is not specified, the loader does not consider the percentage of reset indicators that are less than their previous value.

If *min-perc-reset-counters* is specified, the loader will assume a reset has happened on a counter group if more than that percentage of the reset indicators are less than their previous values. For example, the counter group `AtmPort_NodeB` has two counters defined as reset indicators (`pmReceivedAtmCells` and `pmSecondsWithUnexp`). If there are ten occurrences of `AtmPort_NodeB` within a `.tar.gz` archive, there are 20 occurrences of reset indicators within that group. If *min-perc-reset-counters* is set to 50, then more than 10 of the 20 reset indicators for `AtmPort_NodeB` must be less than their previous values for the loader to detect a reset on the group.

Note that *min-reset-counters* still applies. The loader will detect a reset on a counter group if the number of reset indicators that are less than their previous value is more than *min-reset-counters*, and/or more than *min-perc-reset-counters* as a percentage of the total. If you want to disable the test against *min-reset-counters* and use only *min-perc-reset-counters*, you should set *min-reset-counters* to a value that is much larger than the expected number of reset indicators in one `.tar.gz` archive.

4 Resolved Issues

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

DDTS / SRS	Description
SEAd69383 / SEAd69417 / APAR IZ17114	The values of remediated (accumulating) counters in RANOS were sometimes wrong. This was due to incorrect detection of resets. See Section 3.7 above for further details.
SEAd670022	CR06u0027: NbpDedicated and NodeSynchTp were not supported in the Bulk CM file. (ExternalGsmNetwork has been exempted from being supported.) MR0306085721: Support new NodeB naming convention. See Section 3.6 above for further details. MR0409085556: Support second carriers. See Section 3.6 above for further details.
SEAd653374/SRS7174	Filter criteria in the Template did not filter out records in N-High report.
SEAd661072	Prospect Client upgrade to 8.0 from 7.3 on at least three dual-processor machines failed with a message saying "The wizard was interrupted before WatchMark Prospect could be completely installed."
SEAd662033	The same report definition returned different days when run multiple times before and after manual BH calculation.
SEAd666374/IZ12539	A report group is built using the auto organize command - \$YESTERDAY\$REPORTNAME. However, downloaded spreadsheets do not embody the name with the date.
SEAd666544	Some attempts to recalculate bh manually for specific days due to data backlog ended incorrectly in timeout or connectivity issues to DataServer.
SEAd667118	The AutoClean maintenance job was split in two: clean_scheduler and clean_iot. However they share the original wm_system_values_v parameter: AutoCleanMaxLoops.
SEAd667342/IZ13749	When customer upgrading from one core version to another may have experienced a decrease in the number of report servers starting up. This is due to the RS_DS_LIST being reset to a default when a core upgrade has occurred.
SEAd667520/SRS41325	The healthcheck could not display large table space. It displayed the table space size as pound sign(#) instead of numbers.
SEAd667756	Adding the TABLESPACE clause to BH_DRIVER_TMP and its indexes. The missing clause caused them to be created in WM_CLIENT which is too small.
SEAd667897	clean_iot checked whether any jobs of JOB_TYPE 1,10,25 or 30 were running before it started. The check on JOB_TYPE 2 (Soft Alarm) was missing which caused some soft alarm reports to fail with ORA-01410 - Invalid rows ID error.
SEAd668219	On Jan 1 2008 Venezuela's timezone will switch from UTC-0400 to UTC-0430
SEAd668331	This is a new enhancement for BH that allows us to slice a table during the copy phase.
SEAd668572/IZ09611	When creating a schedule the first time and choosing a wrong starting time; the error that resulted was not meaningful.
SEAd668695/IZ12540	Directories that are to receive RNCpm files for EVDO preparsing (1xRaw) should be set to 775 and not to 755 as they currently are after installing RP15 software. The DAT software was not able to copy the files into the 1xRaw directory.
SEAd668749	ESR: AR 1-1753306: Oracle 10g ORA 22835 error resulted in empty templates.

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DDTS / SRS	Description
SEAd68839/IZ14072	BHSlice did not work as expected in Core8.0.5.0.3.
SEAd68908	The total environment is corrupted once user deleted the default timezone region.
SEAd68933	Change the clean old bh to an immediate insert, unless the override flag is on. In that case, immediate merge, and fallback merge if insert encounters dupe index.
SEAd68939	Incremental Summations allows the system to use previously generated Daily summation in the calculation of Weekly and Monthly summations.
SEAd69008/IZ14162	With the new busyhour changes, during the phase when globalUpdate is running, the ps-mgr watch/pmtop had always displayed 'Busy Hour Update Copy'. This is no longer the case in 8.0.4.
SEAd69134/IZ15662	UDC values involving division were incorrect in reports.
MR0306085721	Prior to RP14, in NodeB files where the Sector numbers did not start at 1, data for Carrier and its children would load under the wrong UtranCells. RP14 derives the mapping from NodeB, Sector and Carrier to UtranCell from the Bulk CM files, and so Sector numbers are no longer assumed (or required) to start at 1.

5 Known Problems

5.1 Confidence Report Displays Null Values [SEAd53522 / SEAd58917]

Description: Confidence reports display null values for BSC and OSSRC.

Impact: BSC and OSSRC confidence reports are not useful.

Workaround: A data availability report can provide similar information to a confidence report. A suitable template is in `\Templates\Available Data Templates\STS_BSC_AvailableData`. If you use this template, make sure that the INCLUDE NULL ROWS option is selected. This option is in the Report Editor, on the REPORT TYPE tab. A version of this is also available for the OSSRC data file format.

5.2 Unable to Save Report Definition when All Split Key Fields are Selected [SEAd56151]

Description: It is not possible to save a report with all split keys selected for some entities low in the hierarchy. If the total length of the names of all the selected entities plus some overhead exceeds 128 characters, the user will not be able to save the report.

Impact: Some reports with split keys cannot be saved.

Workaround: Deselecting some of the entities from the split key panel can resolve the problem for some reports.

5.3 Import Process Sometimes Fails [SEAd56230]

Description: Import of exported user documents sometimes fails. The following message appears in the import log:

```
"SQL*Loader: All/some rows discarded/rejected."
```

Impact: An export of user documents might not always re-import everything that was exported.

Workaround: None.

5.4 Unable to Generate Full Key [SEAd57024]

Description: Data will not load for ASN.1 data for groups RES64K and NONRES64K. The ASN.1 data does not contain enough information to generate a valid full key to use in data loading. The key in sample data is "-" when it should be a valid key value. This is an issue that Ericsson will need to investigate.

Impact: The counters for the two groups will not load for ASN.1 data.

Workaround: None.

5.5 Missing Data Report Displays Unexpected Timestamp Intervals [SEAd58886]

Description: The missing data report displays unexpected timestamp intervals for the OSSRC data file type. If a sub-daily report is run for the OSSRC data file type, then all periods except midnight report missing data.

Impact: The missing data report for OSSRC data files shows missing data for all periods of the day except for midnight.

Workaround: Only run missing data reports for OSSRC-based data at the daily level.

5.6 Null Value Reported in ODBC and ASCII [SEAd58997]

Description: Null values are reported in ODBC and ASCII when using the ODBC Data source editor for OSSRC.

Impact: ODBC data source editor might not show correct values.

Workaround: None.

5.7 Non-Stored Summation Displays Confidence Factor of 90% [SEAd58998]

Description: In testing, non-stored summation report of a sub-network entity displays the confidence factor as 90% even when all data was loaded.

Impact: In some cases, the confidence factor might not be accurate.

Workaround: None.

5.8 SoftAlarms for OSSRC File Type [SEAd59000]

Description: Soft alarms do not trigger for OSSRC data files.

Impact: Soft alarms defined on the counters from the OSSRC data file are not recorded correctly.

Workaround: None.

5.9 10-90 Percentile Graph Report Contains Unwanted Data [SEAd59020]

Description: Graph reports using the 10-90 Percentile macro display macro control data at the end of the report.

Impact: The unwanted data must be cleaned up manually after the report is run.

Workaround: None.

5.10 show-traffic script not in \$PATH [SEAd59022]

Description: The directory containing the `show-traffic` script (`$FLEXPM_HOME/sw/oracle`) is not in `$PATH`.

Impact: It is not possible to run the script from a directory other than `$FLEXPM_HOME/sw/oracle`.

Workaround: Either run `show-traffic` from the specified directory or enter the full path to the script on the command line.

5.11 Counter Values Misaligned in Report if UtranCell Label is in Template [SEAd60613]

Description: If the `LABEL` field of `UtranCell` is included in a template, reports that use that template align the counter values to the left of the spreadsheet cells instead of to the center.

Impact: Such reports might be difficult to read, compared with other reports.

Workaround: Select the affected rows and columns in the spreadsheet and correct the alignment manually.

5.12 ORA-01841 error in loader log when loading empty ASN.1 or TRDIP file [SEAd62164]

Description: Empty ASN.1 and TRDIP files now move to the fail directory when loaded (see SEAd49708, SEAd54391 and LONkw06701 in section 3.1). However, such files now cause the following error message to appear in the loader log:

```
INSERT INTO en_event_file_load_v: ORA-01841: (full) year must
be between -4713 and +9999, and not be 0
```

This message might be followed by further Oracle errors, namely ORA-02291, ORA-06512 and ORA-04088.

Impact: None. The messages are harmless.

Workaround: None.

5.13 Split GSM ASN.1 files may overwrite existing data [SEAd62233]

Description: If GSM ASN.1 data is split into more than one file for a given MSC or BSC and a given timestamp, files processed after the first one may overwrite previously-loaded data with nulls.

Impact: GSM reports might not accurately reflect the contents of the ASN.1 files.

Workaround: None.

5.14 add_filetype_timeout.sh -f <file type> -t <timeout> sometimes fails [SEAd63354]

Description: Running `add_filetype_timeout.sh` sometimes fails with an Oracle error:

```
ORA-02291: integrity constraint (FLEXPM.FK_TASK_STATUS_JOB)
violated - parent key not found.
```

Impact: No notification will be received when an expected file didn't arrive.

Workaround: None.

5.15 Summary job sometimes takes too long to run [SEAd65744]

Description: The summary job can take longer than 24 hours to complete, especially when it inserts into weekly summary tables.

Impact: The summary job sometimes does not finish, and so stored summation data will not be available for some dates.

Workaround: This is fixed in Prospect 8.0.4.2.

5.16 "No data returned" message in RS DataServer log [SEAd68216]

Description: Messages similar to the following appear in the RS DataServer log file, approximately every five minutes:

```
Tx1f |11:13:02|DataServer::handleClientRequest()
|Exception : stream read failed - no data returned
```

Impact: None. The message is harmless.

Workaround: Not applicable.

5.17 Reports that use imported user-defined scenarios may fail [SEAd68458]

Description: If a user-defined scenario, exported from schema *A* and imported into schema *B*, makes reference to instances that exist in *A* but not in *B*, reports that use that scenario will fail with the following error:

```
Exception : [SERVERERROR] ORA-06502: PL/SQL: numeric or value
error: character to number conversion error
```

Impact: Reports, stored busy hours and stored summations that use such scenarios fail.

Workaround: Create a copy of the imported scenario under a new name. This will remove the non-existent instances from the copy. Amend any documents that refer to the imported scenario to refer to the copy. To identify these documents, right click the scenario and select "References" from the popup menu.

5.18 Out-of-order data loading can cause data to be overwritten in GPRS [SEAd68484]

Description: In the GPRS module, if data is loaded out of timestamp order, data that has already been loaded may be overwritten with nulls. This can happen if a backlog in loading data occurs.

Impact: GPRS reports may not be accurate.

Workaround: Reload the data in order of timestamp.

5.19 Scenario activation time reset back to default after core upgrade [SEAd69522]

Description: The scenario activation time is reset to the default run time (01:00 daily) after the core upgrade.

Impact: The scenario activation run time will change if it was set to something other than the default.

Workaround: Run the following command to change it back to the custom time:

```
$ schedule_maint scenario_activation <YYYYMMDD> <HHMI>
```

5.20 Server Prep needs update [valnt00044667]

Description: Upgrading Oracle 9i to 10g steps on editing listener should be done by editing the `listener.ora` file before starting the listener.

Impact: None.

Workaround: Restart the listener.

5.21 Missing parameters in `wm_system_values_v` view [valnt00051564]

Description: During the Fresh Install, three parameters are missing from the `wm_system_values_v` view:

AutoCleanIOTMaxLoops (default value: '5')

EventTruncatePmFolderEventTable (default value:'Y')

SummationForceNI (default value: 'FALSE')

Impact: None. Prospect will use the given default value for each parameter if it is not present in `wm_system_values_v`.

Workaround: However, if there is any abnormal behavior, you can add the relevant parameter(s) to `wm_system_values_v` with the following command in SQL*Plus:

```
exec wm_sysval.newSysValIfNotExists ('parameter-name', 'parameter-value');
```

For example,

```
exec wm_sysval.newSysValIfNotExists ('AutoCleanIOTMaxLoops', '5');
exec wm_sysval.newSysValIfNotExists ('EventTruncatePmFolderEventTable', 'Y');
exec wm_sysval.newSysValIfNotExists ('SummationForceNI', 'FALSE');
```

6 Installation and Upgrade Instructions

6.1 Prerequisites

6.1.1 Oracle XDK

The Oracle Database must have XDK installed. Please refer to the XDK installation guide in the Server Preparation Guide (ServerPrep.pdf, Section 8.6, Page 59) if XDK is not installed.

Log into the database using SQL*Plus:

```
$ sqlplus $DB_CONNECT
```

Please use the following SQL statement to check if the XDK is installed accordingly. Oracle XDK for Java should be there in the result.

For Upgrade Install, the version must be 9.2.0.x.

```
SQL> SELECT comp_id, comp_name, version FROM dba_registry;
```

COMP_ID	COMP_NAME	VERSION
XML	Oracle XDK for Java	9.2.0.10.0

For Fresh Install, the version must be 10.2.3.x.

```
SQL> SELECT comp_id, comp_name, version FROM dba_registry;
```

COMP_ID	COMP_NAME	VERSION
XML	Oracle XDK for Java	10.2.3.0

6.1.2 Java version

Make sure that the installed version of Java is 1.5.0_12 or above. Type the following command:

```
$ java -version
```

The first line of the output will resemble this:

```
java version "1.5.0_12"
```

If Java is not installed, or is an earlier version than required, some programs might not run, or might produce incorrect results.

This specific version of Java is available for download from Sun at the following URL:

http://java.sun.com/products/archive/j2se/5.0_12/index.html

Only the JRE (Java Runtime Environment) is required for Prospect. The JDK (Java Development Kit) is not required.

The default directory for the Java installation is `/usr/java`. However, the JRE can be installed anywhere, which allows multiple versions of Java to co-exist on the same server. If you install Java 1.5.0_12 somewhere other than the default location, then after installation, you need to edit the file `$FLEXPM_HOME/.profile.flexpm` and change the `JAVA_HOME` environment variable to point to the installation directory.

Note that currently, Prospect for Ericsson GGU is *not* compatible with Java 1.6 or later.

6.1.3 Perl Version

Make sure that the default version of Perl is 5.6.1. Type the following command:

```
$ perl -v
```

The first line of the output should start with:

```
This is perl, v5.6.1 built for ...
```

If the version number is wrong, especially if it is earlier than required, some scripts might not run, or might produce incorrect results.

6.1.4 Network Timeouts

If your system has a security policy in place such that a session is disconnected after a lengthy period of apparent inactivity, you should disable it during this upgrade. The upgrade can take a few hours to run and requires no user input during the majority of the upgrade. This can make the upgrade session appear idle. If timeouts are not disabled, the upgrade terminal could be disconnected during the upgrade.

6.1.5 Disk Space and Table Space Requirements

This patch requires at least 400MB free disk space for the user `flexpm` in `$FLEXPM_HOME`. This is required to accommodate the disk usage for the extraction of files and writing of log files during the patch installation.

Note: *It is recommended to always keep 10% of total table space size available for each table space.*

6.1.6 Baseline Requirements

The base environment that this release will be applied against:

- Prospect 8.0 for Ericsson 6.0.13.0.0 base release (either a fresh install or an upgrade from an earlier release)
- Prospect 8.0 for Ericsson 6.0.13.0.10 patch

You can check that the environment is correct by running the following command as the Prospect UNIX user:

```
$ show_installed
```

This will produce output **similar (but not necessarily identical)** to the following:

COMPONENT	INSTALL_TY	INSTALL_DATE
-----	-----	-----
CORE Prospect rev 8.0.4.1 b5	INSTALL	07-NOV-22 20:39:17
VENDOR ErcGSM rev 6.0.13.0.0 b3	INSTALL	07-NOV-23 00:01:34
VENDOR ErcRANOS rev 6.0.13.0.10 b2	UPGRADE	07-NOV-23 00:14:48
VENDOR ErcHLR rev 5.0.12.0.0 b14	INSTALL	07-NOV-23 01:39:32
VENDOR ErcOSSRC rev 5.0.12.0.0 b14	INSTALL	07-NOV-23 01:53:47
VENDOR ErcComExtra rev 5.0.12.0.0 b14	INSTALL	07-NOV-23 01:53:56
VENDOR ErcGPRS rev 6.0.13.0.10 b2	UPGRADE	07-NOV-23 01:02:59

Additional components might be listed; these are unimportant. The versions (`rev`) of CORE Prospect and VENDOR module must be greater than or equal to those shown. The build number (“b” followed by a single digit) and install type (`INSTALL` or `UPGRADE`) for each component is unimportant. The install dates will be different from those shown.

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.*

6.2 Installation Privileges Required

6.2.1 Fresh Install

The following privileges are required for a fresh install.

Privilege	Required
UNIX flexpm user in DBA group	Yes
Root privilege required	Yes
Oracle sys user password set to default (change_on_install)	Yes

6.2.2 Upgrade

The following privileges are required for an upgrade.

Privilege	Required
UNIX flexpm user in DBA group	Yes
Root privilege required	No
Oracle sys user password set to default (change_on_install)	Yes

6.3 Pre-Installation Instructions

6.3.1 System Backup

This upgrade cannot be uninstalled. It involves updates to the database and the metadata; therefore recovery from backup is the only way to reverse the changes made. 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 Warning: Disable server access in Prospect Web

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 result in errors in both the upgrade and Prospect Web. Consult customer support if you have questions.

6.3.3 Note Schedule_maint Settings

If the middleware is down for an extended period of time, the script `schedule_maint` could display some jobs as not scheduled. Thus the jobs will not run and the system will fail.

Before the upgrade, run `schedule_maint` to get a list of the current schedule settings. Make a note of the next run time of each job.

6.3.4 Note Partition Maintenance Settings

During the upgrade a number of new tables are added to the Prospect system. Occasionally this can cause the script `past_part_maint.sh` to display data retention settings as "Unlimited."

Before the upgrade, run `past_part_maint.sh` to get a list of the current data retention settings.

6.3.5 Oracle Sys Account Access

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

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

If you get an error concerning privileges, then you need to continue with the following steps.

2. 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
```

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

```
remote_login_passwordfile=EXCLUSIVE
```

4. 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
```

5. 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`.
6. To verify that the changes have taken effect, repeat step 1.

6.3.6 Check Prospect Environment

1. Log in as user `flexpm`, and source the `.profile` (if you are not already).
2. Check whether `$FLEXPM_HOME`, `$FLEXPM_BASE` and `$release` are set correctly:

```
$ echo $FLEXPM_HOME
$ echo $FLEXPM_BASE
$ echo $release
```

If the variable `FLEXPM_HOME` is not set (the output is just a blank line), or the `release` variable value does not equal to `ProspectBase`, edit the file `.profile` and amend the line that sets the `install` variable to read:

```
install=X
```

where `X` is the current value of the `$FLEXPM_BASE` environment variable (make sure it does not contain `ProspectBase` string, for example, `install="/u01/apps/WatchMark/FlexPM/EricGGU"`).

Amend the line that sets the `release` variable to read:

```
release="ProspectBase"
```

Edit the file `.profile.flexpm` and commenting out (by placing `#` at the beginning of the line) the `install=` and `release=` lines if these 2 lines are in the file.

3. Logout the system and relog in as user `flexpm`, and source the `.profile` to confirm those variables settings are correct.

6.4 Installation Instructions

To install this release as an upgrade, please follow section 6.4.1. For a fresh install on a server that does not already have Prospect for Ericsson, follow section 6.4.2.

6.4.1 Upgrade Instructions

1. Log in as user `flexpm`, and source the `.profile` (if you are not already).
2. Stop the middleware if it is running.

```
$ ps-mgr stop all
$ ps-mgr halt
```

3. Backup the current `.profile` and `.profile.custom` for future reference. Record the value of `$RS_DS_LIST`.

```
$ cd $FLEXP_HOME
$ cp -pf .profile .profile.org
$ cp -pf .profile.custom .profile.custom.org
$ echo $RS_DS_LIST
```

Note: If this server is a multi-schema environment, also record the following values:

```
$ echo $DB_CONNECT
$ echo $PORT_GROUP
$ echo $TNS_ADMIN
```

4. Go to the top-level directory on the CD-ROM.
5. Preview the installation by typing the following command:

```
$ ./wminstall -b $FLEXP_BASE -i ProspectBase -portbase
$PORT_GROUP -d $DB_CONNECT -core_spec core.spec -v -preview
```

If the output from the preview contains any errors, you should address those problems before attempting to install the patch. Note that the following error message is harmless:

```
Incorrect perl version 5.6.1 also found at /usr/local/bin/perl
```

If the output contains no errors, install the patch by running the same command again, but without the `-preview` option, thus:

```
$ ./wminstall -b $FLEXP_BASE -i ProspectBase -portbase
$PORT_GROUP -d $DB_CONNECT -core_spec core.spec -v
```

Notes:

- The installation of the upgrade might take a while to complete. The main terminal where the install command is 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>_<PID>`) under `/var/tmp` can be viewed from another console during the installation for the installation progress. The date will change when each module installs.

- o After `wminstall` is completed, examine the `detail.log` under the directory `$FLEXPM_HOME/audit/< YYYY>_<MM>_<DD>_<HH>_<MM>_<SS>_<PID>` for any error messages.
6. Restore backups of `.profile` and `.profile.custom`

Note: Please refer to the backup files that were saved earlier in Step 3.

```
$ cd $FLEXPM_HOME
$ cp .profile .profile.805
```

Modify `.profile` to copy back `$FLEXPM_HOME` and `$release` variables settings from the backup file `.profile.org`.

Edit the file `.profile.flexpm` commenting out (by placing `#` at the beginning of the line) the `install=` and `release=` lines if these two lines are in the file.

If `$RS_DS_LIST` recorded in step 3 is other than 2 (default), do the following:

```
$ mv .profile.custom .profile.custom.bak
$ cp -p .profile.custom_ .profile.custom
```

Modify file `.profile.custom` by uncommenting the lines (remove `#`) and replacing the `RS_DS_LIST` default value with the recorded value in Step 3. And move **all custom variables** from `.profile.custom.org` to the new `.profile.custom` file.

If this is a **multi-schema** environment, uncomment and replace the values for `DB_CONNECT` and `PORT_GROUP` with the values in `.profile.custom.bak` which should be the same as the recorded values in Step 3.

In addition, you will need to insert the following `TNS_ADMIN` line with the value recorded in Step 3 after the `PORT_GROUP` but before the `.profile.connect` line.

For example,

```
export RS_DS_LIST="2"
DB_CONNECT="flexpm/flexpm@flexpm" \
PORT_GROUP="6440" \
TNS_ADMIN=/u01/apps/oracle/network/admin \
. ${FLEXPM_HOME}/.profile.connect
```

6.4.2 Fresh Install Instructions

To perform a fresh install of the Prospect software the Install Guide should be followed with the exception of section 2.3.2, "Install the Prospect Server Package", which this entry replaces.

Perform the following steps to extract the Prospect software from the Prospect server installation CD-ROM. This updates the /u01 file system.

Note: For information about advanced installation options, see *wminstall Options* on page 21 of the *Install Guide*.

1. Ensure that the desired workspace directory and schema do not exist on the server. The default workspace and schema are as below:

Workspace: /u01/apps/WatchMark/FlexPM/EricssonGGU

Schema: flexpm/flexpm@flexpm

The workspace and schema above should not exist in the server.

2. Go to the drive containing the Prospect server CD.
3. Export the following environment settings for Oracle 10g. Use the correct values for ORACLE_BASE and ORACLE_HOME if they differ from below.

```
export ORACLE_BASE=/u01/apps/oracle
export ORACLE_HOME=/u01/apps/oracle/product/10.2.0
export ORACLE_SID=flexpm
export LD_LIBRARY_PATH=$ORACLE_HOME/lib:$LD_LIBRARY_PATH
export PATH=$ORACLE_HOME/bin:$PATH:$HOME:..
```

4. Preview the installation by typing the following command:

```
./wminstall -core_spec core.spec -preview -v
```

If the output from the preview contains any errors, you should address those problems before attempting to install the application. Note that the following error message is harmless:

```
Incorrect perl version 5.6.1 also found at /usr/local/bin/perl
```

If the output contains no errors, install the application by running the same command again, but without the `-preview` option, thus:

```
./wminstall -core_spec core.spec -v
```

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

5. When file extraction has completed, eject the installation CD from the CD-ROM drive.

```
cd ..
eject cdrom
```

Notes:

- The installation might take a while to complete. The main terminal where the install command is executed seems to hang occasionally at the `INSTALL` section for each module. The log file (with a file name like `<YYYY>__<MM>__<DD>__<HH>__<MM>__<SS>`) under `/var/tmp` can be viewed from another console during the installation to monitor the installation progress. The date changes as each module installs.
- After `wminstall` is completed, examine the file `detail.log` under the directory `$FLEXP_HOME/audit/< YYYY>_<MM>_<DD>_<HH>_<MM>_<SS>` for any error messages. Oracle errors regarding attempts to drop non-existent objects can be ignored.

6.5 Post-Installation Instructions

6.5.1 Resource the Profile

After the installation finishes, log out and log back in as `flexpm`, source the `.profile` in the `$PROSPECT_HOME` (if you have not done so already).

6.5.2 Change of ftpIN Permission

Run the following command to change ftpIN permission to allow Virtuo Mediation to copy files into it.

```
$ chmod 775 $PROSPECT_HOME/../../ftpIN
$ chmod -R 775 $PROSPECT_HOME/../../ftpIN/*
```

6.5.3 Copy the updated Ericsson RANOS Jloader file (ericsson-ranos.jar)

This file is at the top level of the CD-ROM. Type the following commands:

Back up the original file first:

```
$ mv $PM_HOME/pm/jloader/lib/plugins/ericsson-ranos.jar
$PM_HOME/pm/jloader/lib/plugins/ericsson-ranos.jar.bak
```

Copy over the new version of file:

```
$ cp ericsson-ranos.jar $PM_HOME/pm/jloader/lib/plugins/
```

6.5.4 Check for invalid objects

After an upgrade finishes, it is useful to check for any invalid objects in the database. Log into the database using SQL*Plus:

```
$ sqlplus $DB_CONNECT
SQL> select object_type, object_name from user_objects where
status='INVALID' and object_type<>'VIEW';
```

This should produce the output:

```
no rows selected
```

If the above `SELECT` statement outputs some rows, please recompile the schema. Use the correct value for `schema_name` if it differs from below:

```
SQL> execute dbms_utility.compile_schema('schema_name',FALSE);
```

If your `schema_name` is `FLEXPM`, you can use the command as below:-

```
SQL> execute dbms_utility.compile_schema('FLEXPM',FALSE);
```

6.5.5 Installed Version Verification

After an upgrade or fresh install finishes, it is helpful to run `show_installed`, to confirm that everything installed correctly:

For an upgrade, the output from `show_installed` should be similar to the following:

COMPONENT	INSTALL_TY	INSTALL_DATE
CORE Prospect rev 8.0.5.0 b8	UPGRADE	08-AUG-05 12:04:59
CORE Prospect rev 8.0.5.3 b1	PATCH	08-AUG-05 12:07:26
VENDOR ErcGSM rev 6.0.14.0.0 b3	UPGRADE	08-AUG-05 12:07:36
VENDOR ErcRANOS rev 6.0.14.0.0 b3	UPGRADE	08-AUG-05 12:52:26
VENDOR ErcOSSRC rev 6.0.14.0.0 b3	UPGRADE	08-AUG-05 12:52:34
VENDOR ErcGPRS rev 6.0.14.0.0 b3	UPGRADE	08-AUG-05 12:52:29
VENDOR ErchLR rev 6.0.14.0.0 b3	UPGRADE	08-AUG-05 12:52:31
VENDOR ErcComExtra rev 6.0.14.0.0 b3	UPGRADE	08-AUG-05 12:52:33

For a fresh install, the output should resemble the following:

COMPONENT	INSTALL_TY	INSTALL_DATE
CORE Prospect rev 8.0.5.0 b8	INSTALL	08-AUG-05 11:53:22
CORE Prospect rev 8.0.5.3 b1	PATCH	08-AUG-05 11:55:01
VENDOR ErcGPRS rev 6.0.14.0.0 b3	INSTALL	08-AUG-05 13:12:00
VENDOR ErchLR rev 6.0.14.0.0 b3	INSTALL	08-AUG-05 13:31:41
VENDOR ErcOSSRC rev 6.0.14.0.0 b3	INSTALL	08-AUG-05 13:38:14
VENDOR ErcComExtra rev 6.0.14.0.0 b3	INSTALL	08-AUG-05 13:38:25
VENDOR ErcGSM rev 6.0.14.0.0 b3	INSTALL	08-AUG-05 12:05:17
VENDOR ErcRANOS rev 6.0.14.0.0 b3	INSTALL	08-AUG-05 13:00:35

The component names and version numbers (`rev`) should be the same as those shown. The build numbers (“b” followed by one or more digits) might be different. The install dates and times will be different from those shown.

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6.5.6 JAVA_HOME Verification

If you installed a new version of Java and it is somewhere other than the default directory (`/usr/java`), edit the file `$FLEXPM_HOME/.profile.flexpm` and change the environment variable `JAVA_HOME` to point to the directory where you installed Java. You will need to log out and log in again for this change to take effect.

6.5.7 Start the Middleware

If everything is OK, restart the middleware:

```
$ wmpm-init start all
```

6.5.8 Post Install Checking

1. `schedule_maint`

After the middleware has been restarted, run `schedule_maint` to check the next run time of the scheduled jobs. If any of the jobs display the next run time as "job not scheduled," then run `schedule_maint` and update the values to an appropriate future time based on the settings you recorded in Section 6.3.3.

For example, to set the `pm_daily` job to run at 1:00 am on 1 May 2006.

```
$ schedule_maint pm_daily 20060501 0100
```

Note: Remember to enter a time in the future. If unsure of appropriate times then please contact customer support

2. `past_part_maint`

Run `past_part_maint.sh` to get a list of the current data retention settings. If any of the number displays is different that settings you recorded in Section 6.3.4, then run `past_part_maint.sh` to update the values.

For example, to have 30 days' data retention for UMTS traffic table types:

```
$ past_part_maint.sh UMTS 30
```

6.5.9 Enable Datasource in Prospect Web

If this Prospect system is associated with a Prospect Web system and you disabled the datasource in section 6.3.2, then use the Prospect Web Administration Tool to enable the datasource with this Prospect system.

6.6 Uninstallation Procedure

The upgrade version of this release cannot be uninstalled. It involves updates to the database and the metadata, and therefore recovery from backup is the only way to reverse the changes made by this release. 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.

The fresh install version can be uninstalled, but this will leave the database schema empty. That is, it will delete all traffic data and user documents. Use the following procedure to uninstall Prospect for Ericsson.

1. Log in as the Prospect UNIX user (typically `flexpm`) and type the following commands.

```
$ ps-mgr stop all
$ ps-mgr halt
```

2. `cd` to each of the following directories in turn and type `make clean` in each one. The first `make clean` will take a long time; subsequent ones should be faster.

```
$ErcComExtra_HOME
$ErcOSSRC_HOME
$ErcGPRS_HOME
$ErcHLR_HOME
$ErcRANOS_HOME
$ErcGSM_HOME
$PM_HOME
$PM_HOME/dbuser
```

3. Type the following commands.

```
$ cd $FLEXPM_BASE
$ pwd
```

The result should be the top-level directory where you installed Prospect for Ericsson. The default is `/u01/apps/WatchMark/FlexPM/EricssonGGU`. If you are in the right directory, type:

```
$ cd ..
$ rm -rf $FLEXPM_BASE
```

This will delete all the files that comprise Prospect for Ericsson. It will also delete any traffic data files that have been transferred to the Prospect server. These files are stored in the directory structure under `$PROSPECT_HOME/./ftpIN`.

7 Useful Hints

7.1 Use of `add_filetype_timeout.sh` is not recommended

Using the `add_filetype_timeout.sh` script is not recommended, as the user will wait a considerable amount of time. This is caused by the time taken for the script to clean the schedule table during the middleware start up.

The `add_filetype_timeout.sh` script is not recommended to be used for checking the data file if it does not arrive as expected. If used, user will have to wait for a substantial long period of time as the `add_filetype_timeout.sh` script increases the time to clean up the schedule table when the middleware is started up.

7.2 Solaris 10 Zones not supported

Prospect 8.0.5 does not support Solaris 10 zones.

7.3 Traffic Template Description Length Limitation in Prospect Client

Field description in traffic template editor has a limitation of displaying 260 characters only. Traffic template editor will display only the first 260 characters when the actual length of field description is longer than that.

For complete field description, please refer to Prospect *Performance Data Reference* or the online help.

7.4 Oracle 10g Upgrade

Important: Oracle 9i to 10g upgrade should be performed after Prospect Core 8.0.5 server upgrade.

For further information on upgrading Oracle 9i to 10g, please refer to Section 8.2, 8.3 and Appendix A of *Server Preparation Guide*.

7.5 Set `ranos-suppress-error-threshold` parameter to higher value

The `ranos-suppress-error-threshold` parameter in `/u01/apps/WatchMark/FlexPM/EricssonGGURP8/ErcRANOS/vendor/Ericsson/RANOS/1.3/RANOS_loader/jloader/config.xml` needs to be set to a higher value to prevent the loader from moving RANOS data file to `convertfail` directory when the number of error caused by not matching PM and CM data is greater than the parameter value. The error message that caught in loader log is similar to this:

```
18:52:19,802 ERROR [RanosDNRewriterFunctions] Failed to rewrite
DN: 'MeContext=CYCMCALLRNC002,RncFunction=1,UtranCell=CLU2230M,GsmR
elation=LAR002X' - no known reason
```

8 Customer Support

Contact IBM customer support if a problem is encountered during the installation of this patch or release.

9 Manifest

The manifest for this release is contained in a file called `Manifest.txt` at the top level of the CD-ROM.

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