# *NEXUS*

### *Version 1.3*

### *DEVELOPER DOCUMENTATION*

***Christophe Cartwright***

***IT DEVELOPER***

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# **Documentation Overview**

| Manual | Version | Contents |
| --- | --- | --- |
| NEXUS:  The Basics | 1.3 | Defines NEXUS and its role between BILLING and |
| NEXUS: Flow Process | 1.3 | Outlines diagrammatically the process flow of NEXUS from a Internet Change Request in BILLING to the Profile Creation / Update in Ticketing |
| NEXUS: Oracle Database objects. Header Description for source code provided. GENERIC source code available on NEXUS GITBUB repository). | 1.3 | Details the functionality of the Oracle (v 9.2.0.8.0) DB objects used by NEXUS ADAPTER: Oracle DB objects. They include:   * TABLES * GRANTS * TRIGGERS * SEQUENCES * PACKAGES * PROCEDURES * UserLock.SQL |
| NEXUS: Microsoft SQL Database objects. Header Description for source code provided. GENERIC source code available on NEXUS GITBUB repository). | 1.3 | Details the functionality of the Microsoft SQL (v 2005) Database objects used by NEXUS. Objects include:   * TABLES * STORED PROCEDURES |
| NEXUS:  JAVA Classes. Header Description for source code provided. GENERIC source code available on NEXUS GITBUB repository). | 1.3 | Details the functionality and dependencies of the Java Source Classes of NEXUS. |

# **NEXUS – THE BASCIS**

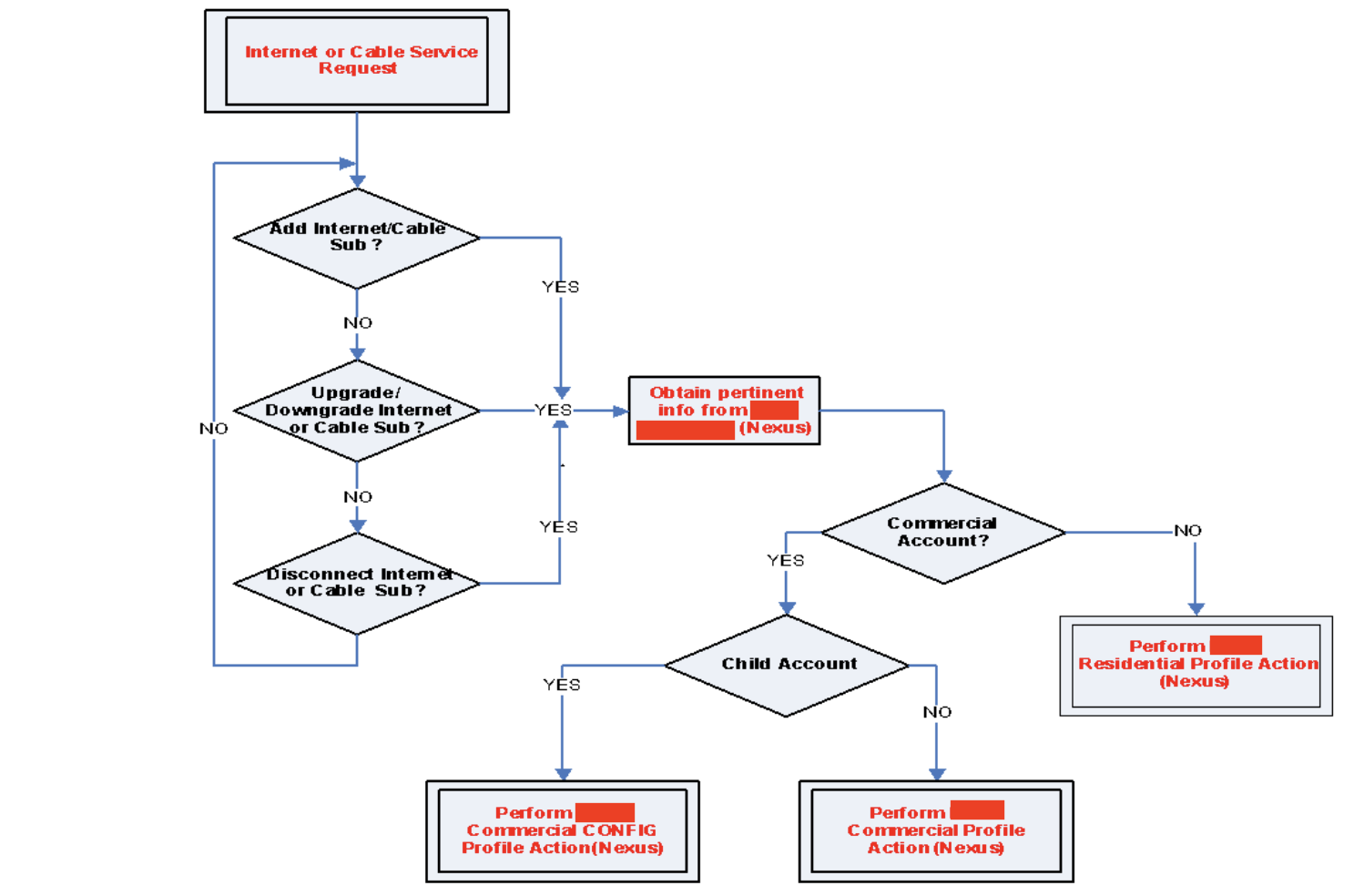
**What is NEXUS?**

* A custom designed java-powered middleware application:
  + Acts as an intermediary between different application components.
  + Nexus links the BILLING System and the Help Desk Support Ticketing application .

**What does it do?**

* Automatically and correctly creates or modifies Profiles:
* **Residential (Phase 1)**
* Populate the “Account Information” Section
* Populate the Profile Type, Service Level and MAC-Address fields of the Services Section
* **Commercial (Phase 2)**
* Populate the “Account Information” Section for “Parent” Profile Accts
* Populate the Profile Type, Service Level, SLA Class, SLA Urgency and MAC-Address fields of the Services Section for “Parent” Profile Accts
* Populate the “Account Information” Section for “Child” Configuration Profile Accts
* Populate the Profile Type, Service Level, SLA Class, SLA Urgency and MAC-Address fields of the Services Section for “Child” Configuration Profile Accts

# **NEXUS Process FLOW**



# **NEXUS: ORACLE DATABASE OBJECTS**

## ***TABLESPACE***

<DESIRED\_TABLE\_TABLESPACE\_NAME> and <DESIRED\_INDEX\_TABLESPACE\_NAME> are the developers Table-Spaces within the BILLING System Oracle 9i Database. It is the storage home for all the tables and objects used in NEXUS. Any and all NEXUS development projects going forward that involve any database objects should be installed in this Table-Space.

**Please see \_NEXUS\_DBOBJECT\_CREATION\_BILLING.sql for the Oracle SQL source code for Table-Spaces <DESIRED\_TABLE\_TABLESPACE\_NAME> and <DESIRED\_INDEX\_TABLESPACE\_NAME>. NOTE - the source code structure is preserved, however structure details have transitioned to a generic template model. You will have to modify to suit for your objectives.**

## ***SEQUENCES (owner:*** <BILLING SCHEMA1>***)***

Sequences are a special Database objects that reside on a table and generate unique numbers for a column to ensure uniqueness for a given row.

Whenever an insert into a table occurs with a sequence, the sequence’s next value only need be referenced to generate the next unique value in the row sequence.

For the NEXUS ADAPTER sequences are currently deployed:

* SEQUENCE NEXUS\_PROFILE\_SEQ

**Please see \_NEXUS\_DBOBJECT\_CREATION\_BILLING.sql for the Oracle SQL source code for sequence NEXUS\_PROFILE\_SEQ. NOTE - the source code structure is preserved, however structure details have transitioned to a generic template model. You will have to modify to suit for your objectives.**

## ***TABLE NEXUS\_PROFILE (owner:*** <BILLING SCHEMA1>***)***

TABLE NEXUS\_PROFILE temporarily stores the account information that is bound for a Parent/Child Profile. Changes made within the Billing application with respect to Internet customers say:

* An upgrade or downgrade of the customers internet services
* A disconnection of an internet service
* An installation of an internet service
* An Update of the Mac Address for a customer

will result in core account information of the customer getting stored in the TABLE <BILLING SCHEMA1>.NEXUS\_PROFILE.

**Please see \_NEXUS\_DBOBJECT\_CREATION\_BILLING.sql for the Oracle SQL source code for table NEXUS\_PROFILE and its index[s]. NOTE - the source code structure is preserved, however structure details have transitioned to a generic template model. You will have to modify to suit for your objectives.**

## ***TABLE NEXUS\_RATECODES (owner:*** <BILLING SCHEMA1>***)***

TABLE NEXUS\_RATECODES stores the rate code information that is bound for a Parent / Child Profile. Changes made within the Billing application with respect to customers say:

* An upgrade or downgrade of the customers rate services
* A disconnection of a rate/service code(s)
* An installation of rate/service code(s)
* An Update of the equipment for a customer

would result in the customer profile flow from billing to with the rate codes determining a customer’s Service Level Agreement [SLA], and the service descriptions for a customers profile on the Ticketing Side.

**Please see \_NEXUS\_DBOBJECT\_CREATION\_BILLING.sql for the Oracle SQL source code for table NEXUS\_RATECODES. NOTE - the source code structure is preserved, however structure details have transitioned to a generic template model. You will have to modify to suit for your objectives.**

## ***TABLE NEXUS\_ERROR (owner:*** <BILLING SCHEMA1>***)***

With any of the triggers, packages and stored procedures associated with the NEXUS ADAPTER, any failures or exceptions generated are captured and stored in the NEXUS\_ERRORS table.

The data in the NEXUS\_ERROR table details the object that threw the error, the account, date and actual error message.

**Please see \_NEXUS\_DBOBJECT\_CREATION\_BILLING.sql for the Oracle SQL source code for table NEXUS\_ERRORS. NOTE - the source code structure is preserved, however structure details have transitioned to a generic template model. You will have to modify to suit for your objectives.**

## ***TABLE NEXUS\_LOCATION\_CHILD\_ACCOUNTS (owner:*** <BILLING SCHEMA1>***)***

NEXUS\_LOCATION\_CHILD\_ACCOUNTS table is used to identify the company name and associated parent account ID for a subsidiary / child company which just had a service / equipment change made on its behalf.

This table is a work-around solution, which should become deprecated upon the implementation of BILLING’s Account Hierarchy (expected deployed date is EOY 2012).

**Please see \_NEXUS\_DBOBJECT\_CREATION\_BILLING.sql for the Oracle SQL source code for table NEXUS\_LOCATION\_CHILD\_ACCOUNTS. NOTE - the source code structure is preserved, however structure details have transitioned to a generic template model. You will have to modify to suit for your objectives.**

## ***PERMISSIONS (***<BILLING SCHEMA1> ***and*** <BILLING SCHEMA2> ***users)***

* Currently the user <BILLING SCHEMA1> is the official owner of the BILLING system Database objects.
* The <BILLING SCHEMA2> user is a database user which has been given both read access to the <BILLING SCHEMA1> nexus objects via synonyms and grants [SELECT].
* To access and use objects owned by other users, the user can request the DBA to:
* Create a set of private synonyms on the various DB objects and grant access on the synonyms to the appropriate schema users requiring access. This is best practice approach based on principle of least privilege.

## ***TRIGGERS (owner:*** <BILLING SCHEMA1>***)***

Triggers are a special PL/SQL construct similar to procedures. However, a procedure is executed explicitly from another block via a procedure call, while a trigger is executed implicitly whenever the triggering event happens.

The triggering event is as INSERT, DELETE, or UPDATE command. The timing can be either BEFORE or AFTER. The trigger can be either row-level or statement-level, where the former fires once for each row affected by the triggering statement and the latter fires once for the whole statement.

For NEXUS four triggers are currently deployed:

* TRIGGER \_NEXUS\_CRS\_STATUS\_AI
* TRIGGER \_NEXUS\_CRS\_STATUS\_AU
* TRIGGER \_NEXUS\_WIP\_RATECD\_AI
* TRIGGER \_NEXUS\_WIP\_RATECD\_AU

Each trigger’s functionality is outlined below. For NEXUS, triggering changes to the account profile are based in two Billing sections. **Please see the <TRIGGERS> folders content within the <ORACLE> directory for the Oracle SQL source code for the above triggers. NOTE - the source code structure is preserved, however structure details have transitioned to a generic template model. You will have to modify to suit for your objectives.**

### **TRIGGER \_NEXUS\_CRS\_STATUS\_AI**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Trigger Name : \_NEXUS\_CRS\_STATUS\_AI \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Date : [release-date] \*\*

\*\* Description : When features on an account are modified for BILLING \*\*

\*\* : services, the Account info is captured and \*\*

\*\* : transferred to the outbound NEXUS\_PROFILE table \*\*

\*\* \*\*

\*\* Inputs : none \*\*

\*\* Outputs : none \*\*

\*\* \*\*

\*\* Acknowledgements: \*\*

\*\* <https://oracle-base.com/articles/9i/mutating-table-exceptions> \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **TRIGGER \_NEXUS\_CRS\_STATUS\_AU**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Trigger Name : \_NEXUS\_CRS\_STATUS\_AU \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Date : [release-date] \*\*

\*\* Description : When features on an account are modified for BILLING \*\*

\*\* : services, the Account info is captured and \*\*

\*\* : transferred to the outbound NEXUS\_PROFILE table \*\*

\*\* \*\*

\*\* Inputs : none \*\*

\*\* Outputs : none \*\*

\*\* \*\*

\*\* Acknowledgements: \*\*

\*\* <https://oracle-base.com/articles/9i/mutating-table-exceptions> \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **TRIGGER \_NEXUS\_WIP\_RATECD\_AI**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Trigger Name : \_NEXUS\_WIP\_RATECD\_AI \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Date : [release-date] \*\*

\*\* Description : When features on an account are modified for BILLING \*\*

\*\* : services, the Account info is captured and \*\*

\*\* : transferred to the outbound NEXUS\_PROFILE table \*\*

\*\* \*\*

\*\* Inputs : none \*\*

\*\* Outputs : none \*\*

\*\* \*\*

\*\* Acknowledgements: \*\*

\*\* <https://oracle-base.com/articles/9i/mutating-table-exceptions> \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **TRIGGER \_NEXUS\_WIP\_RATECD\_AU**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Trigger Name : \_NEXUS\_WIP\_RATECD\_AU \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Date : [release-date] \*\*

\*\* Description : When features on an account are modified for BILLING \*\*

\*\* : services, the Account info is captured and \*\*

\*\* : transferred to the outbound NEXUS\_PROFILE table \*\*

\*\* \*\*

\*\* Inputs : none \*\*

\*\* Outputs : none \*\*

\*\* \*\*

\*\* Acknowledgements: \*\*

\*\* <https://oracle-base.com/articles/9i/mutating-table-exceptions> \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

## ***PACKAGE \_NEXUS\_PKG (owner:*** <BILLING SCHEMA1> ***)***

(Stored) Procedures are named groups of SQL statements that have been previously created and stored in the server database and accept input parameters. Thus several clients using different input data can use a single procedure over the network.

(Stored) procedures also reduce network traffic, improve performance and can be used to help ensure the integrity of the database.

The Package \_NEXUS\_PKG groups the NEXUS (stored) procedures together based on their functionality. Thirteen (stored) procedures are currently deployed.

* NEXUS\_GET\_PROFILE\_COUNT
* NEXUS\_GET\_RATECD\_INFO
* NEXUS\_GET\_WIPCUSTRATE\_INFO
* NEXUS\_GET\_CUST\_OUTLET
* NEXUS\_GET\_CUSTTYPE
* NEXUS\_GET\_RELATION
* NEXUS\_GET\_LOCATION
* NEXUS\_GET\_CUSTINFO
* NEXUS\_GET\_CUSTSTAT
* NEXUS\_GET\_HOUSEINFO
* NEXUS\_DROP\_ACCTINFO
* NEXUS\_GET\_ACCTINFO
* NEXUS\_PUT\_ACCTINFO

\_NEXUS\_PKG package has two sections: the header section that contains a definition of the procedure objects and a body section that contains the implementation of the procedure objects.

**Both \_NEXUS Package header definition and body source code details can be found the files \_NEXUS\_APP\_PACKAGE.sql + \_NEXUS\_APP\_PACKAGE\_BODY.sql within the ORACLE> directory. NOTE - the source code structure is preserved, however structure details have transitioned to a generic template model. You will have to modify to suit for your objectives.**

Each (Stored) Procedure’s functionality is outlined below**.**

### **PROCEDURE NEXUS\_GET\_PROFILE\_COUNT**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Author: Christophe Cartwright: DBA \*

\* Date: <appropriate-date> \*

\* \*

\* Procedure: NEXUS\_GET\_PROFILE\_COUNT (Phase I) \*

\* Description: Determine row count in Nexus\_Profile Table \*

\* Input: <SANITIZED: use your desired-inputs> \*

\* Output: Row Total (number) \*

\* \*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **PROCEDURE NEXUS\_GET\_RATECD\_INFO**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Procedure Name: NEXUS\_GET\_RATECD\_INFO (Phase I) \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Date : <appropriate-date> \*\*

\*\* Description : Extracts Service Type from \*\*

\*\* : table schema1.NEXUS\_RATECODES \*\*

\*\* Inputs : <SANITIZED: use your desired-inputs> \*\*

\*\* Outputs : <SANITIZED: use your desired-outputs> \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Revision History - NEXUS\_GET\_RATECD\_INFO (Phase IV) \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Revision Date : <appropriate-date> \*\*

\*\* details : Customer type now enforced elsewhere. \*\*

\*\* : Code here no longer needed and removed \*\*

\*\* : \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **PROCEDURE NEXUS\_GET\_WIPCUSTRATE\_INFO**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Procedure Name: NEXUS\_GET\_WIPCUSTRATE\_INFO (Phase I) \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Date : <appropriate-date> \*\*

\*\* Description : Extracts Service Type from \*\*

\*\* : table schema1.NEXUS\_RATECODES \*\*

\*\* Inputs : <SANITIZED: use your desired-inputs> \*\*

\*\* Outputs : <SANITIZED: use your desired-outputs> \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Revision History - NEXUS\_GET\_WIPCUSTRATE\_INFO (Phase IV) \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Revision Date : <appropriate-date> \*\*

\*\* details : Customer type now enforced elsewhere. \*\*

\*\* : Code here no longer needed and removed \*\*

\*\* : \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **PROCEDURE NEXUS\_GET\_CUST\_OUTLET**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Author: Christophe Cartwright \*

\* Date: <appropriate-date> \*

\* \*

\* ProcedureName:NEXUS\_GET\_CUST\_OUTLET (Phase II) \*

\* Description: Customer Equip Info extracts for Profile \* \* \*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **PROCEDURE NEXUS\_GET\_CUSTTYPE**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Procedure Name: NEXUS\_GET\_RATETYPE \*

\*\* Author: Christophe Cartwright \*

\*\* Revision Date: 26th May 2006 \*

\*\* Description: Stored Procedure obtains Customer Type \*

\*\* Inputs: : <SANITIZED: use your desired-inputs> \*

\*\* Outputs: : <SANITIZED: use your desired-inputs> \*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **PROCEDURE NEXUS\_GET\_RELATION**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Author: Christophe Cartwright \*

\* Date: <appropriate-date> \*

\* \*

\* Procedure :NEXUS\_GET\_RELATION (Phase I) \*

\* Description :Determine Relation (Parent Account or Child Subsidiary) \*

\* :for Profile / Child Profile \*

\* Inputs : <SANITIZED: use your desired-inputs> \*

\* Outputs : <SANITIZED: use your desired-outputs> \*

\* \*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **PROCEDURE NEXUS\_GET\_LOCATION**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Procedure Name: NEXUS\_GET\_LOCATION \*

\*\* Author: Christophe Cartwright \*

\*\* Revision Date: <appropriate-date> \*

\*\* Description: Extracts outlet location for account \*

\* Inputs : <SANITIZED: use your desired-inputs> \*

\* Outputs : <SANITIZED: use your desired-outputs> \*

\* \*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **PROCEDURE NEXUS\_GET\_CUSTINFO**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Author: Christophe Cartwright: \*

\* Date: <appropriate-date> \*

\* \*

\* Procedure: NEXUS\_GET\_CUSTINFO (Phase I) \*

\* Description: Customer Core Account Info extracts for Profile \*

\* Inputs : <SANITIZED: use your desired-inputs> \*

\* Outputs : <SANITIZED: use your desired-outputs> \*

\* \*

\* Revision: <revision-date>,Christophe Cartwright \*

\* History Revised NEXUS\_GET\_CUSTINFO to include dual status \*

\* (Phase II) \*

\* \*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **PROCEDURE NEXUS\_GET\_CUSTSTAT**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Author: Christophe Cartwright \*

\* Date: <appropriate-date> \*

\* \*

\* Procedure : NEXUS\_GET\_CUSTSTAT (Phase I) \*

\* Description : Obtains the customer account status \*

\* \*

\* Inputs : <SANITIZED: use your desired-inputs> \*

\* Outputs : <SANITIZED: use your desired-outputs> \*

\* \* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **PROCEDURE NEXUS\_GET\_HOUSEINFO**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\* Author: Christophe Cartwright: Junior DBA, Cable Billing \*

\* Date: 10th Sept 2007 \*

\* Procedure: NEXUS\_GET\_HOUSEINFO (Phase I) \*

\* Description: House Stat Account Info extracts for Ticketing Profile \*

\* \*

\* Inputs : <SANITIZED: use your desired-inputs> \*

\* Outputs : <SANITIZED: use your desired-outputs> \*

\* \*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **PROCEDURE NEXUS\_DROP\_ACCTINFO**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Procedure Name: NEXUS\_DROP\_ACCTINFO (Phase I) \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Revision Date: <appropriate\_date> \*\*

\*\* details : Removes Account info from the NEXUS\_PROFILE table \*\*

\*\* \*\*

\*\* Inputs : <SANITIZED: use your desired-inputs> \*\*

\*\* Outputs : <SANITIZED: use your desired-outputs> \*\*

\*\* \*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **PROCEDURE NEXUS\_GET\_ACCTINFO**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Procedure Name: NEXUS\_GET\_ACCTINFO \*\*

\*\* Author: Christophe Cartwright \*\*

\*\* Revision Date: <appropriate\_date> \*\*

\*\* details: Obtains Account info for the \_PROFILE \*\*

\*\* Inputs : <SANITIZED: use your desired-inputs> \*\*

\*\* Outputs : <SANITIZED: use your desired-outputs> \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Revision History - NEXUS\_GET\_ACCTINFO (Phase IV) \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Revision Date: <appropriate\_date> \*\*

\*\* details : Added CustSLA Field. This will assist in consolidating \*\*

\*\* : RateCode entries (type, sla) into a single system \*\*

\*\* : (BILLING) \*\*

\*\* \*\*

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### **PROCEDURE NEXUS\_PUT\_ACCTINFO**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Procedure : NEXUS\_PUT\_ACCTINFO (Phase I) \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Revision Date: <appropriate\_date> \*\*

\*\* Details : Revised GetStatus SP to pull additional fields \*\*

\*\* : for the NEXUS Profile \*\*

\*\* \*\*

\*\* Inputs : <SANITIZED: use your desired-inputs> \*\*

\*\* Outputs : <SANITIZED: use your desired-outputs> \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Revision History - \*\*

\*\* \*\*

\*\* Procedure : NEXUS\_PUT\_ACCTINFO (Phase III) \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Revision Date: <appropriate\_date> \*\*

\*\* Details : Revised NEXUS\_PUT\_ACCTINFO to include more \*\*

\*\* : Status (Active, Dual, Disc, etc). Added \*\*

\*\* : Code Class and Type to further distinguish \*\*

\*\* : between Commercial vs Residential and Cable, \*\*

\*\* : Data and voice Services \*\*

\*\* \*\*

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/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Revision History - \*\*

\*\* \*\*

\*\* Procedure : NEXUS\_PUT\_ACCTINFO (Phase IV) \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Revision Date: <appropriate\_date> \*\*

\*\* Details : Revised NEXUS\_PUT\_ACCTINFO to incorporate \*\*

\*\* : Customer SLAs (from their service). Obtaining \*\*

\*\* : Customer Type (Residential, Commercial, etc) \*\*

\*\* : also revised in new SP (NEXUS\_GET\_CUSTTYPE) \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

# **NEXUS: Microsoft SQL DATABASE OBJECTS**

## ***TABLE PARENT PROFILE (owner:*** Ticketing ***user)***

Within the Ticketing system, TABLE PARENT PROFILE holds the account profiles of all parent (res / comm) customers within the Billing System pulled by NEXUS.

## TABLE CHILD PROFILE (owner: Ticketing user)

Similarly, within Ticketing, sub TABLE CHILD PROFILE hosts the account profiles of all child (commercial only) accounts from the Billing System pulled by NEXUS.

## ***TABLE CableServices (owner:*** Ticketing ***user)***

TABLE Cable Services is a table that is linked and referenced by the Profile table to display a customer’s Cable TV Services, and its associated equipment and outlets.

## ***TABLE DataServices (owner:*** Ticketing ***user)***

TABLE Data Services is a table that is linked and referenced by the Profile table to display a customer’s High Speed Data Services, and its associated equipment and outlets.

## ***TABLE VoiceServices (owner:*** Ticketing ***user)***

TABLE Voice Services is a table that is linked and referenced by the Profile table to display a customer’s Voice Services, and its associated equipment and outlets.

**NOTE:** **At the time of documentation, Company LTD does NOT have a voice license. This feature is built in for scalability; in the event that a Voice License is secured – development will be complete / at a minimal.**

## ***Microsoft SQL STORED*** PROCEDURES ***(owner: ticketing user)***

(Stored) Procedures [SPs] are named groups of SQL statements that have been previously created and stored in the server database. SPs accept input parameters. Hence several clients using different input data can use a single procedure over the network. SPs reduce network traffic and improve performance. Additionally, stored procedures can be used to help ensure the integrity of the database.

NEXUS uses seven (stored) procedures (currently deployed on the Microsoft SQL Server Database):

* \_NEXUS\_GET\_ACC\_ISLAND
* \_NEXUS\_CABLE\_SERVICES
* \_NEXUS\_DATA\_SERVICES
* \_NEXUS\_VOICE\_SERVICES
* \_NEXUS\_PROFILE\_SERVICES
* \_NEXUS\_PARENT\_PROFILE
* \_NEXUS\_CHILD\_PROFILE

Each (Stored) Procedure’s functionality is outlined below**. NOTE - the source code structure is preserved, however data and structure details have transitioned to a generic template model. You will have to modify to suit for your objectives.**

### **PROCEDURE \_NEXUS\_GET\_ACC\_ISLAND**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Procedure Name: \_NEXUS\_<SP\_NAME> (Release X) \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Date : <SANITIZED: use your desired date> \*\*

\*\* Description : Determine the Correct Island for the Profile \*\*

\*\* \*\*

\*\* Inputs : <SANITIZED: use your desired-inputs>, ex: \*\*

\*\* @Input\_Variable\_of\_Varchar\_Type, \*\*

\*\* @Input\_Variable\_of\_Integer\_Type \*\*

\*\* \*\*

\*\* Outputs : @Results \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **PROCEDURE \_NEXUS\_CABLE\_SERVICES**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Procedure Name: \_NEXUS\_VOICE\_SERVICES (Release X) \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Date : <SANITIZED: use your desired date> \*\*

\*\* Description : Updates | Creates Customer Cable Service Section \*\*

\*\* \*\*

\*\* Inputs : <SANITIZED: use your desired-inputs>, ex: \*\*

\*\* @Input\_Variable\_of\_Varchar\_Type, \*\*

\*\* @Input\_Variable\_of\_Integer\_Type \*\*

\*\* \*\*

\*\* Outputs : @Results \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **PROCEDURE \_NEXUS\_DATA\_SERVICES**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Procedure Name: \_NEXUS\_VOICE\_SERVICES (Release X) \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Date : <SANITIZED: use your desired date> \*\*

\*\* \*\*

\*\* Description : Updates | Creates Customer Data Service Section \*\*

\*\* Inputs : <SANITIZED: use your desired-inputs>, ex: \*\*

\*\* @Input\_Variable\_of\_Varchar\_Type, \*\*

\*\* @Input\_Variable\_of\_Integer\_Type \*\*

\*\* \*\*

\*\* Outputs : @Results \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **PROCEDURE \_NEXUS\_VOICE\_SERVICES**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Procedure Name: \_NEXUS\_VOICE\_SERVICES (Release X) \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Date : <SANITIZED: use your desired date> \*\*

\*\* Description : Updates | Creates Customer Voice Service Section \*\*

\*\* \*\*

\*\* Inputs :<SANITIZED: use your desired-inputs>, ex: \*\*

\*\* @Input\_Variable\_of\_Varchar\_Type, \*\*

\*\* @Input\_Variable\_of\_Integer\_Type \*\*

\*\* \*\*

\*\* Outputs : @Results \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **PROCEDURE \_NEXUS\_PROFILE\_SERVICES**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Procedure Name: \_NEXUS\_PROFILE\_SERVICES (Release X) \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Date : <SANITIZED: use your desired date> \*\*

\*\* Description : Invokes one of the SPs (Cable/ Data/ Voice) \*\*

\*\* : Service SPs based on Parameters from Parent/ \*\*

\*\* : Child Profile call \*\*

\*\* \*\*

\*\* Inputs : <SANITIZED: use your desired-inputs>, ex: \*\*

\*\* @Input\_Variable\_of\_Varchar\_Type, \*\*

\*\* @Input\_Variable\_of\_Integer\_Type \*\*

\*\* \*\*

\*\* Outputs : @Results \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **PROCEDURE \_NEXUS\_PARENT\_PROFILE**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Procedure Name: \_NEXUS\_PARENT\_PROFILE (Release X) \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Date : <SANITIZED: use your desired date> \*\*

\*\* Description : Inserts or Updates a Profile from the \*\*

\*\* : billing application for a Parent (Res / Comm) \*\*

\*\* : profile. Services include Cable, Data and voice \*\*

\*\* \*\*

\*\* Inputs : <SANITIZED: use your desired-inputs>, ex: \*\*

\*\* @Input\_Variable\_of\_Varchar\_Type, \*\*

\*\* @Input\_Variable\_of\_Integer\_Type \*\*

\*\* \*\*

\*\* Outputs : @Results \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### 

### **PROCEDURE \_NEXUS\_CHILD\_PROFILE**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Procedure Name: \_NEXUS\_CHILD\_PROFILE (Release X) \*\*

\*\* Author : Christophe Cartwright \*\*

\*\* Date : <SANITIZED: use your desired date> \*\*

\*\* Description : Inserts or Updates a Profile from the \*\*

\*\* : billing application for a Child (Commercial only) \*\*

\*\* : sub-profile. Services include Cable, Data and voice \*\*

\*\* \*\*

\*\* Inputs : <SANITIZED: use your desired-inputs>, ex: \*\*

\*\* @Input\_Variable\_of\_Varchar\_Type, \*\*

\*\* @Input\_Variable\_of\_Integer\_Type \*\*

\*\* \*\*

\*\* Outputs : @Results \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

# **NEXUS: JAVA CLASSES**

The NEXUS Java classes combine to create the transport-layer application component of NEXUS. The classes are designed and developed entirely in Java and perform the following:

* Connects to the BILLING system
* Extracts internet customer data from the NEXUS back-end Oracle Database objects
* Transports the data to the help Desk support system
* Updates the appropriate Internet profile account with the BILLING data using the NEXUS back-end table and stored procedures.
* Log accounts which:
  + Have the incorrect BILLING account format
  + Have failed to be correctly created or updated in the profile section

Each Class’ functionality is outlined below**. NOTE - the source code structure is preserved, however any sensitive details have transitioned to a generic template model. You will have to modify to suit for your objectives.**

### **CLASS \_NEXUS\_JDBC\_Connection**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* \*\*

\*\* Class Name: \_NEXUS\_JDBC\_Connection, version 1.1 \*\*

\*\* \*\*

\*\* Author: Christophe Cartwright \*\*

\*\* \*\*

\*\* Position: IT Developer \*\*

\*\* \*\*

\*\* Release Date: 8th March 2007 \*\*

\*\* \*\*

\*\* Description: Declares and Instantiates the JDBC connections for the \*\*

\*\* thread connections to the TICKETING and BILLING DataBases. \*\*

\*\* Also it contains the non-default port that the modules \*\*

\*\* establishes a socket connection on. This file \*\*

\*\* should be kept secured \*\*

\*\* \*\*

\*\* Dependencies: None \*\*

\*\* \*\*

\*\* Inputs: None \*\*

\*\* \*\*

\*\* Outputs: None \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **CLASS \_NEXUS\_Run**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Class Name: \_NEXUS\_Run, version 1.1 \*\*

\*\* \*\*

\*\* Author: Christophe Cartwright \*\*

\*\* \*\*

\*\* Position: IT Developer \*\*

\*\* \*\*

\*\* Release Date: 8th March 2007 \*\*

\*\* \*\*

\*\* Description: Implements the Runnable Interface to allow the \*\*

\*\* threads to access the methods and variables \*\*

\*\* of the Object \*\*

\*\* \*\*

\*\* Dependencies: \_Thread \*\*

\*\* \*\*

\*\* Inputs: none \*\*

\*\* \*\*

\*\* Outputs: none \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

### **CLASS \_NEXUS\_Thread**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Class Name: \_NEXUS\_Thread, version 1.1 \*\*

\*\* \*\*

\*\* Author: Christophe Cartwright \*\*

\*\* \*\*

\*\* Position: IT Developer \*\*

\*\* \*\*

\*\* Release Date: 8th March 2007 \*\*

\*\* \*\*

\*\* Description: Declares and Instantiates a NEXUS Object, and launches \*\*

\*\* threads. The threads simultaneously and independently \*\*

\*\* run through the NEXUS Object to update the \*\*

\*\* Profile Account. \*\*

\*\* \*\*

\*\* \_NEXUS\_Thread also creates a socket connection to \*\*

\*\* allow the NOC (with LinkAnalyst) to monitor HET NEXUS.\*\*

\*\* This option is not used \*\*

\*\* \*\*

\*\* \*\*

\*\* Dependencies: None \*\*

\*\* \*\*

\*\* Inputs: None \*\*

\*\* \*\*

\*\* Outputs: None \*\*

\*\* \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

**CLASS \_NEXUS\_Module**

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

\*\* Class Name: \_NEXUS\_Module, Version 5, Release I \*\*

\*\* Author: Christophe Cartwright \*\*

\*\* Position: Oracle Resource, IT Developer \*\*

\*\* Release Date: 15th October 2009 \*\*

\*\* Description: Automatically Creates | Updates customer Parent \*\*

\*\* or Child profile from BILLING \*\*

\*\* All Services (Cable, Data & Voice) are now automatically created \*\*

\*\* updated with their associated equipment + outlet. Service status is \*\*

\*\* more granular (Active, Disc, Inactive, Pending Restart, etc). Finally \*\*

\*\* Customer status is introduced (Active, Never, Dual, Plant, Disconnect). \*\*

\*\* \*\*

\*\* Release 5 Add On features: \*\*

\*\* All information about Services now consolidated into Single Platform \*\*

\*\* (BILLING) (ex Type, SLA, Desc). Service Table on Ticketing Side deprecated \*\*

\*\* \*\*

\*\* Dependencies: \*\*

\*\* \*\*

\*\* Classes: \*\*

\*\* \_NEXUS\_JDBC\_Connection\_Acct \*\*

\*\* \_NEXUS\_Run \*\*

\*\* \_NEXUS\_Thread \*\*

\*\* \*\*

\*\* Stored Procedures: \*\*

\*\* MSSQL 2005: \*\*

\*\* \_NEXUS\_GET\_ACC\_ISLAND \*\*

\*\* \_NEXUS\_CABLE\_SERVICES \*\*

\*\* \_NEXUS\_DATA\_SERVICES \*\*

\*\* \_NEXUS\_VOICE\_SERVICES \*\*

\*\* \_NEXUS\_PROFILE\_SERVICES \*\*

\*\* \_NEXUS\_CHILD\_PROFILE \*\*

\*\* \_NEXUS\_PARENT\_PROFILE \*\*

\*\* Triggers: \*\*

\*\* BILLING Oracle 9i: \*\*

\*\* \_NEXUS\_CRS\_STATUS\_AI \*\*

\*\* \_NEXUS\_CRS\_STATUS\_AU \*\*

\*\* \_NEXUS\_WIP\_RATECD\_AI \*\*

\*\* \_NEXUS\_WIP\_RATECD\_AU \*\*

\*\* Packages: \*\*

\*\* BILLING Oracle 9i: \*\*

\*\* \_NEXUS\_APP\_PKG \*\*

\*\* Tables: \*\*

\*\* MSSQL 2005: \*\*

\*\* Cable + Data + Voice Services, Child Profile, Parent Profile \*\*

\*\* \*\*

\*\* BILLING Oracle 9i: \*\*

\*\* <SCHEMA>.NEXUS\_PROFILE \*\*

\*\* <SCHEMA>.NEXUS\_SERVICE \*\*

\*\* <SCHEMA>. NEXUS\_LOCATION\_CHILD\_ACCOUNTS \*\*

\*\* <SCHEMA>. NEXUS\_ERROR \*\*

\*\* <SCHEMA>. NEXUS\_SERVICE\_MENU \*\*

\*\* \*\*

\*\* Input: Thread-Name \*\*

\*\* Output: None \*\*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/