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A detail on how to raise a database patch, guidelines to follow while creating them and the naming convention to use for the patch filename.

Phase2 – Database Patches

Walkthrough

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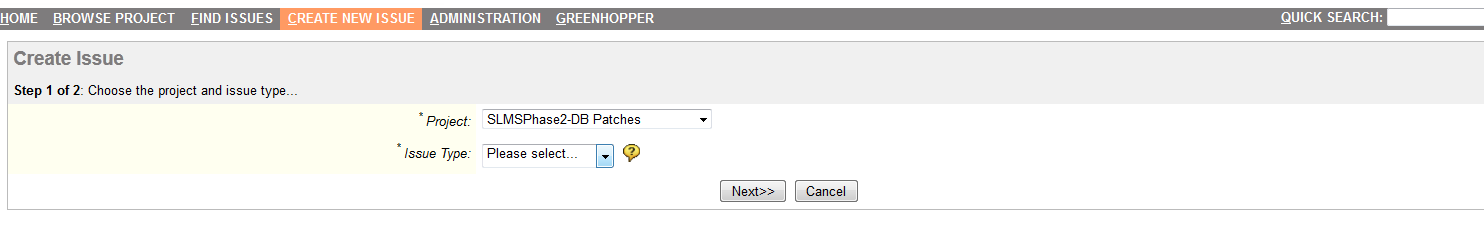
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# **SLMS2 - Database Patches**

# **How to raise a patch:**

Below is the Project and Issue type to be selected when you need to raise a ticket for a database patch.

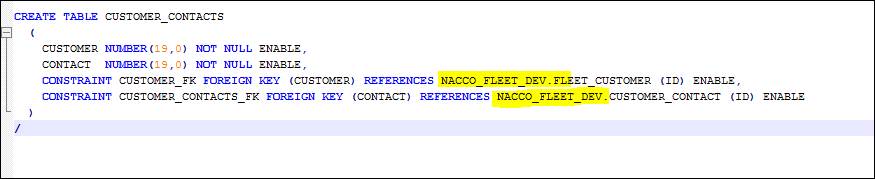


Also, while you raise a patch please keep in mind and follow the below guidelines, without which a patch maybe be rejected.

# **Patch creation guidelines:**

1. No semi colons after a SQL (ANT does not recognise semi colons , hence leading to a break in execution )
2. No hard coded IDs .
3. No commits in DDL
4. Add commits in DML
5. End all statements with '/'.No spaces to follow this. (ANT looks for this after every SQL/program block)
6. No SPACES after statements (Since ANT does not recognise spaces ,hence leading to a break in execution)
7. No return character after the last ‘/’ in the file
8. Include author of the patch and purpose in this first two lines. Note this has to be commented however.
9. Do NOT hard code schema names in the SQL in the patch (unless it is a patch to create a synonym).

Reason: We run the patches on various schemas so the schema name is not constant.



1. When you copy the DDL do not include the tablespace , pct free , inittrans , etc values (highlighted in the below screenshot)Reason: Oracle will auto allocate these values on new schemas. 

1. Include creation of foreign keys in a separate DDL .sql file but can be in the same ticket.

Reason: It is quite often seen that foreign key references to a table rasied in one ticket is not yet created since the ticket which creates the referencing table comes later in the ticket list.

                E.g.

CREATE TABLE CUSTOMER\_LOCATIONS

(

    CUSTOMER                     NUMBER(19,0) NOT NULL ENABLE,

    LOCATIONS\_MAPKEY             VARCHAR2(255 CHAR),

    ID                           NUMBER(19,0) NOT NULL ENABLE,

    QUOTE\_THRESHOLD\_AMT          NUMBER(19,2),

    QUOTE\_THRESHOLD\_CURR         VARCHAR2(255 CHAR),

    DEALER\_QUOTE\_VARIANCE        NUMBER(19,2),

    VARIANCE\_IN\_PERCENTAGE       NUMBER(1,0),

    CREATE\_SERVICE\_REQUEST       NUMBER(1,0),

    PERIODIC\_SERVICE\_CALL        NUMBER(1,0),

    ETA\_ON\_SERVICE\_REQUEST       NUMBER(1,0),

    SELF\_DIAGONOSIS\_ENABLED      NUMBER(1,0),

    UPDATE\_OPEN\_SERVICE\_REQUEST  NUMBER(1,0),

    SELF\_DIAGNOSIS\_MANDATORY     NUMBER(1,0),

    PURCHASE\_ORDER\_REQUIRED      NUMBER(1,0),

    DUPLICATE\_PO\_NUMBER\_ALLOWED  NUMBER(1,0),

    PO\_LENGTH\_SPECIFIED          NUMBER(1,0),

    PURCHASE\_ORDER\_LENGTH        NUMBER(2,0),

    PO\_REGULAR\_EXPRESSION        VARCHAR2(255 CHAR),

    PO\_DETAILS                   VARCHAR2(255 CHAR),

    CUSTOMER\_NOTES               VARCHAR2(255 CHAR),

    IS\_ACTIVE                    NUMBER(1,0),

    CODE                         VARCHAR2(255 CHAR),

    SPECIAL\_INSTRUCTIONS         VARCHAR2(255 CHAR),

    CONSTRAINT CUSTOMER\_LOCATIONS\_PK PRIMARY KEY (ID) ENABLE,

~~CONSTRAINT CUSTOMERLOCATIONS\_CUSTOMER\_FK FOREIGN KEY (CUSTOMER) REFERENCES FLEET\_CUSTOMER(ID) ENABLE,~~

~~CONSTRAINT CUSTOMER\_LOCATIONS\_ID\_FK FOREIGN KEY (ID) REFERENCES ORGANIZATION (ID) ENABLE~~

  )

The foreign key constraint creation needs to go into a sepearate .sql file with the below contents , but in the same ticket.

ALTER table CUSTOMER\_LOCATIONS add CONSTRAINT CUSTOMERLOCATIONS\_CUSTOMER\_FK FOREIGN KEY (CUSTOMER) REFERENCES FLEET\_CUSTOMER(ID) ENABLE,

ALTER table CUSTOMER\_LOCATIONS add CONSTRAINT CUSTOMER\_LOCATIONS\_ID\_FK FOREIGN KEY (ID) REFERENCES ORGANIZATION (ID) ENABLE

1. Unit test any patch before raising a ticket for it and undo the action. This will eliminate any possible errors which may not be visible to the naked eye.

# **Patch filename guidelines:**

* Patch file name to start with the ticket number e.g. **NADB2-1.**
* Next, suffix DML patch names with ‘\_DML’ and DDL patch names with ‘\_DDL’ . Separate Patches for DMLs and DDLs  need to created , can be in the same ticket however e.g. NADB2-1**\_DDL**
* Next , provide appropriate/meaningful names for patch files(file name not to exceed 55 characters and WITHOUT spaces) e.g. NADB2-1\_DDL\_REFR\_ **PATCH\_FOR\_CREATING\_TABLE\_CUSTOMER\_LOCS**
* File to be of sql file type (i.e. with '.sql' extension). . e.g. NADB2-1\_DDL\_REFR\_ PATCH\_FOR\_CREATING\_TABLE\_CUSTOMER\_LOCS**.sql .** Please do note that .sql must be in lower case