

# Network Manager

## Release Notes v4.5.0.0 Fix 23

## Introduction

This document defines the changes made to the Network Manager product for fix release v4.5.0.0 Fix 23 and is specifically targeted at end users.

After reading through this document, should you have any further training or consultancy requirements then please contact your **Bentley** account manager.

## Fix Details

|                             |   |
|-----------------------------|---|
| Baseline Release            | 4.5.0.0   |
| Fix Description             | A general update fix. See notes against each ticket/task number for details. There are several changes some of which have been shipped as part of a previous fix. Many of these fixes have been supplied as fixes on earlier releases such as v4.4.0.0 and this general update patch is aimed at bringing their behaviour into line.  |
| Prerequisites               |   |
| Implementation Instructions | <p>Unzip nm_4500_fix23.zip to a staging folder.</p> <p>Go to the relevant exor\bin directory on the Oracle Application Server and rename the following files:-<br/>hig1505.fmx to hig1505_old.fmx<br/>hig1860.fmx to hig1860_old.fmx<br/>hig1862.rep to hig1862_old.rep<br/>hig1866.rep to hig1866_old.rep</p> <p>Then copy in the new version of each of these files in the relevant exor\bin folder from the staging folder.</p> <p>Log onto SQL*PLUS as the Highways Owner with the staging folder as the working directory.</p> <p>At the prompt type "START nm_4500_fix23.sql" and press return.</p> <p>Exit SQL*PLUS.</p> |
| Limitations                 | None known  |
| Configuration Information   | None  |
| How To Test                 | Recommend full regression test  |
| Rollback Strategy           | Initially implement on a test environment   |

## List of Amended Files

| Filename                   | Version |
|----------------------------|---------|
| doc_bundle_loader.pkw      | 3.11    |
| extent_fk_cascade.sql      | 1.3     |
| grant_execute_any_type.sql | 1.0     |
| hig1505.fmx                | 5.1     |
| hig1860.fmx                | 5.1     |
| hig1862.rep                | 5.1     |
| hig1866.rep                | 5.1     |
| invsec.pkw                 | 2.3     |
| mv_highlight_index.sql     | 3.1     |
| nm3api_inv.pkw             | 2.6     |
| nm3extent.pkw              | 2.7     |
| nm3homo.pkw                | 2.21    |
| nm3inv.pkw                 | 2.30    |
| nm3inval.pkw               | 2.15    |

| Filename                      | Version  |
|-------------------------------|----------|
| nm3mapcapture_ins_inv.pkw     | 2.8      |
| nm3nwad.pkw                   | 2.14     |
| nm3pla.pkw                    | 2.13     |
| nm3sde.pkw                    | 2.18     |
| nm3sdm.pkw                    | 2.57.1.2 |
| nm3sdo.pkw                    | 2.71.1.1 |
| nm3sdo_edit.pkw               | 2.15     |
| nm_inv_items.trg              | 2.6      |
| v_doc_gateway_resolve.vw      | 1.0      |
| v_nm_admin_units_tree.vw      | 3.0      |
| v_nm_rebuild_all_inv_sdo_join | 3.3      |
| v_nm_rebuild_all_nat_sdo_join | 3.4      |

## Log No. Summary

This chapter summarises all software changes that have been made in this release.

These changes are derived from the following sources,

- Issues raised by Customers via Bentley Support
- Issues raised internally by Bentley colleagues

### Issues

| Internal Task ID | Issue  | Support Log(s) |
|------------------|--|----------------|
| 0109100          | The act of closing (end-dating) an asset will now ensure that spatial representations of the asset within date-tracked spatial layers are also end-dated.  |                |
| 0110909          | The asset location relative to a circular route is faulty when is located across the initial and end nodes of the route but does not completely cover the route. The resultant asset location is identical to the result when the user has created an exclusive asset along the whole circular route - from start to end, then replaced it with a new asset internally within the measures of the route. The two fragments at each end of the circular route were failing to be displayed as two fragments. This was due to a faulty order-by clause which failed to pin down the order - hence the problem did not always arise and is very difficult to replicate.   | 8001049753     |
| 0111286          | Spatial triggers generated on foreign table spatial representations were coded with a SRID derived from the original layer. If a system user refreshed the SRID, the triggers would need to be regenerated. The triggers are now able to take a change to a table's srid value into account without regeneration of the triggers. Existing triggers will need to be refreshed for this to take effect. Care should be exercised in this respect in case any customer specific logic has been added to the triggers.  |                |
| 0111467          | Reclassifying a group with secondary AD data could fail with date-related problems   | 8001178316     |
| 0111482          | Any Non-primary AD data on a group would cause the reclassify to fail due to date logic checks. The ad link record was not being set with an appropriate start date causing an error RA-20000: NET-0011: Start date is out of range of parent.: - NM_NW_AD_LINK_ALL.NAD_NE_ID 01-JAN-2011 >  | 8001187136     |
| 0111660          | The reports have SQL which makes use of the LEVEL pseudo column within a query block that doesn't have a connect by. At some stage, the rules governing the use of the pseudocolumn have changed. As a workaround, use the Oracle option _allow_level_without_connect_by to re-engineer compatibility using:<br><br>alter system set "_allow_level_without_connect_by"=true scope=both;<br><br>See Oracle Metalink note:<br>Use _allow_level_without_connect_by to Revert Back to 9i Hierarchical Query Behavior [ID 271939.1]   | 8001300575     |
| 0111681          | Security of asset data in the 4500 release is based on context variables which govern access independently to the session owner. In the FGAC restriction was being set to null for all unrestricted session owners despite the setting of the proxy user context variables. The unrestricted test is now supplemented with a test to ensure that the proxy user has not been set different to the session owner.   |                |
| 0111802          | Changes have been made to the registration process of the sde metadata to make an attempt to re-use existing SRIDs. Problems in the case of an exception handler meant that if more than one appropriate SRID was available, too-many-rows was raised and was being handled in the same way as no data found - leading to extraneous SRIDs. Also, where the Oracle SDO SRID was null and base SDE metadata existed with a projection (in the SRTTEXT of the ESRI SRID) code existed with cursors which joined on the SDO SRID without an NVL - leading to no-data-found and further registrations.   | 8001292184     |
| 0111809          | The problem is possibly caused by SM creating faulty extents from route layers. The extent is a three tier hierarchy and APIs exist to remove any one of the three tiers of data. SM only plugs into two of the three APIs allowing the removal of the extent or the extent member datums. To minimise the problem, the extent hierarchy is now cascaded after the API so at least the top level can be cleaned out.<br><br>Prior to this fix, the foreign keys from extent members and extent member datums were disabled but on many cases inadvertently enabled on customer sites. The script executes a clean up - removing all orphan member and member datums before re-creating the foreign key with the cascade delete option. | 8001269723     |

| Internal Task ID | Issue  | Support Log(s) |
|------------------|--|----------------|
| 0111818          | The generation of a spatial layer representing assets dynamically segmented from inventory location data now results in a theme which defaults the UPDATE_ON_EDIT flag to I for Immediate. Foreign table data will remain unaffected and will be generated with the flag set to N indicating asset spatial data will remain unchanged.   | 8001298116     |
| 0111848          | Server code has changed to prevent the end-date of asset locations where the chosen date is earlier than other locations for the same asset. This has been coded in the API used inside the forms modules but has also been coded inside the API used in many CSV loader implementations. It is code in both areas to avoid server header changes which have impact on the forms modules. Forms have been coded with an exception handler such that the server exception is trapped a more meaningful and formatted error message is displayed.  | 8001288133     |
| 0111878          | Using this fix allows the loading of hierarchies of assets to complete when using the CSV loader. Flags that were currently set only during the batch loading are now configured inside the nm3mapcapture_ins_inv.ins_inv procedure so that subordinate metadata is properly handled.  | 8001314953     |
| 0111881          | This fix repairs the problem with using PBI queries which executed to give no results with an error suggesting that no network obeying the criteria could be found. Also, PBI queries returned incorrect results in some cases where a network extent over which the query was executed was smaller than the coverage of the asset.  | 8001274633     |
| 0111882          | Complexities arising from testing and loading locations of child assets with an inherited location during the loading of data from MapCapture load files have been simplified. The code will now ignore any child locations in cases where the child asset type has an AT relation to the parent and where the parent location exists. Other areas of code will ensure that the child asset location is inherited from its parent.   | 8001298259     |
| 0111904          | This fix is mainly present to support the NSG application. There are changes in the behaviour of an internal Oracle Spatial API, the minimum bounding rectangle and validation of a specific geometry type has changed such that the minimum values are zero. The impact of this difference in behaviour had been corrected in the original 4.5.0.0 release. However, a knock-on effect was that a specific API inside nm3sdo package no longer failed. During the installation of an empty NSG database, the extent of the existing network is computed and if the error arises, the NSG system interprets it to indicate that hard-coded UK bounds are created. Since it no-longer returns an error, the system registered empty dimension information with an end-result that the NSG loader fails to generate shapes. This fix is critical for new NSG installations, impact is minimal elsewhere. |                |
| 0111923          | Network operations such as Split may fail with privilege problems when executed by a subordinate user. this could be due to the user not being granted privileges on the use of some oracle object types.  | 8001297944     |
| 0111996          | Ordering of the admin-units in the form has been improved. A new view is created to assist in the ordering of tree items alphabetically within each branch.  | 8001319906     |
| 0111998          | When querying Audits within the form HIG1505, using a non-existing type the form no longer raises an Information message: "Query caused no record to be retrieved. Reenter". The form will now allow the query but will return no rows in cases where an invalid type is queried.  | 8001300531     |
| 0112116          | Some subordinate user metadata in the mdsys.sdo_geom_metadata_table would be retained after a layer had been dropped. This is now corrected.   |                |