Network Manager
Release Notes v4.4.0.0 Fix 11

Introduction

This document defines the changes made to the Network Manager product for fix release v4.4.0.0 Fix 11 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	4.4.0.0
Fix Description	Network Manager 4.4.0.0 Fix 11 Patchset. A general 4.4 fix release (see release notes for details)
Prerequisites	
Implementation Instructions	Unzip nm_4400_fix11.zip to a staging folder. Log onto SQL*PLUS as the Highways Owner with the staging folder as the working directory. At the prompt type "START nm_4400_fix11.sql" and press return. Exit SQL*PLUS.
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
extent_fk_cascade.sql	1.3
log_nm_4400_fix11.sql	3.0
nm0510.fmx	4.19.1.2
nm0575.fmx	4.6
nm0575.pkw	2.12
nm3api_inv.pkw	2.4.1.0
nm3extent.pkw	2.3.1.2
nm3homo.pkw	2.18.1.1
nm3invval.pkw	2.12.1.0
nm3pla.pkw	2.9
nm3rsc.pkw	2.4.1.1
nm3sdm.pkw	2.39.1.4
nm3sdo_edit.pkw	2.11.1.1
nm_4400_fix11.sql	3.1

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

Issues

Internal Task ID	Issue	Support Log(s)
0111406	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
0111523	Problems in the location of assets in the asset items form were caused by dates being modified during the validation process. This change often occurred in a manner that was not noticed by the user. It led to difficulties in validation of the network extent over which the asset was being re-located. Same as task 0111765, ticket 8001229762	8001178954
0111527	End-dating of inventory locations would allow completion despite locations in existence after the date of closure. This was due to the check being based on the locations of the inventory at the date at which the user wished to close it. A better checking process is now included and an exception raised if the locations cannot be closed.	8001172067 8001288133
0111530	Ensure the IIT_PRIMARY_KEY column is validated based on the Mandatory flag if defined as a flexible inventory attribute. The form behaves correctly with different variations of the option SHOWINVPK.	8001187536
0111539	Resequence and rescale each can refresh a route shape. Resequence will be governed by system options (when provided). The option SDORESEQ can take values of H for History, U for Update and N for No-change. The resequence operation does not allow a specific date. It uses the current effective date. The codes default behaviour is currently to refresh the route shape at the current date; earlier shapes will be end-dated. This is consistent with the SDORESEQ option being set to H. If the value is set to U, the resequence will update the current shape where one exists and inserts a shape where one does not exist. If the option is set to N - no shape updates will be processed.

However, in cases where a resequence has been executed and a rescale operation has been executed at an earlier date, there are possibilities of the end-date of a shape being earlier than a start date - this is wrong.

The route shape is an aggregated shape - it is formed from aggregating many datum shapes at different dates. When a resequence or a rescale operation is performed which will process the reshaping of the route, there are three dates that are important. The first is the date argument for the process (available on the rescale) - ArgDate. The second is the date of the current record ShpDate and the third is the greatest member date of all members MemDate (this is the max(greatest(nm_start_date, nm_end_date)) of members).

Any reshape operation will prevent the existence of a route shape at a date < MemDate - if it were to allow this, the current shape ¦ which reflects the current shape of the route is compromised by a new shape which reflects the state of data at an historic date. If a shape exists at a later date than MemDate then it is free to be modified at the later of MemDate or ArgDate. | 8001192315 |
0111762	The asset items form now displays the user-defined primary key correctly in the main/top block when the option SHOWINVPK is set to Y	8001264873
0111765	Problems in the asset items form relating to the date of the location of an asset when it is being re-located. Same as task 0111523, ticket 8001178954	8001229762
0111807	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

Internal Task ID	Issue	Support Log(s)
0111810	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 din both areas to avoid server header changes which have impact on the forms modules. Forms have been coed with an excpetion handler such that the server exception is trapped a more meaningful and formatted error messge is displayed.	8001288133
0111837	The problem is possibly caused by SM creating faulty extents from route layers. The extent is a three tier hiearchy 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. 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 cleanup - removing all orphan member and member datums before re-creating the foreign key with the cascade delete option.	8001269723
0111866	The reports have SQL whcih 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: alter system set "_allow_level_without_connect_by"=true scope=both; See Oracle Metalink note: Use _allow_level_without_connect_by to Revert Back to 9i Hierarchical Query Behavior [ID 271939.1]	8001300575
0111879	Hierarchies of with a relation of AT driven by point XY data are now kept in sync when the parent XY is changed. So, if the XY of the parent is changed, the subordinates are also updated. If the parent asset snaps to the network and the child assets are similarly located on the network, the subordinate network locations are also kept in sync.	8001300676