

Diagnostics

Migrate Smallworld 5



Diagnostics Promise

What: real-time insight into the operations and performance of your Smallworld ecosystem

Why: so you can optimize the user experience and improve overall productivity

DIAGNOSTICS®



In control



Why Diagnostics now & later?

- NOW

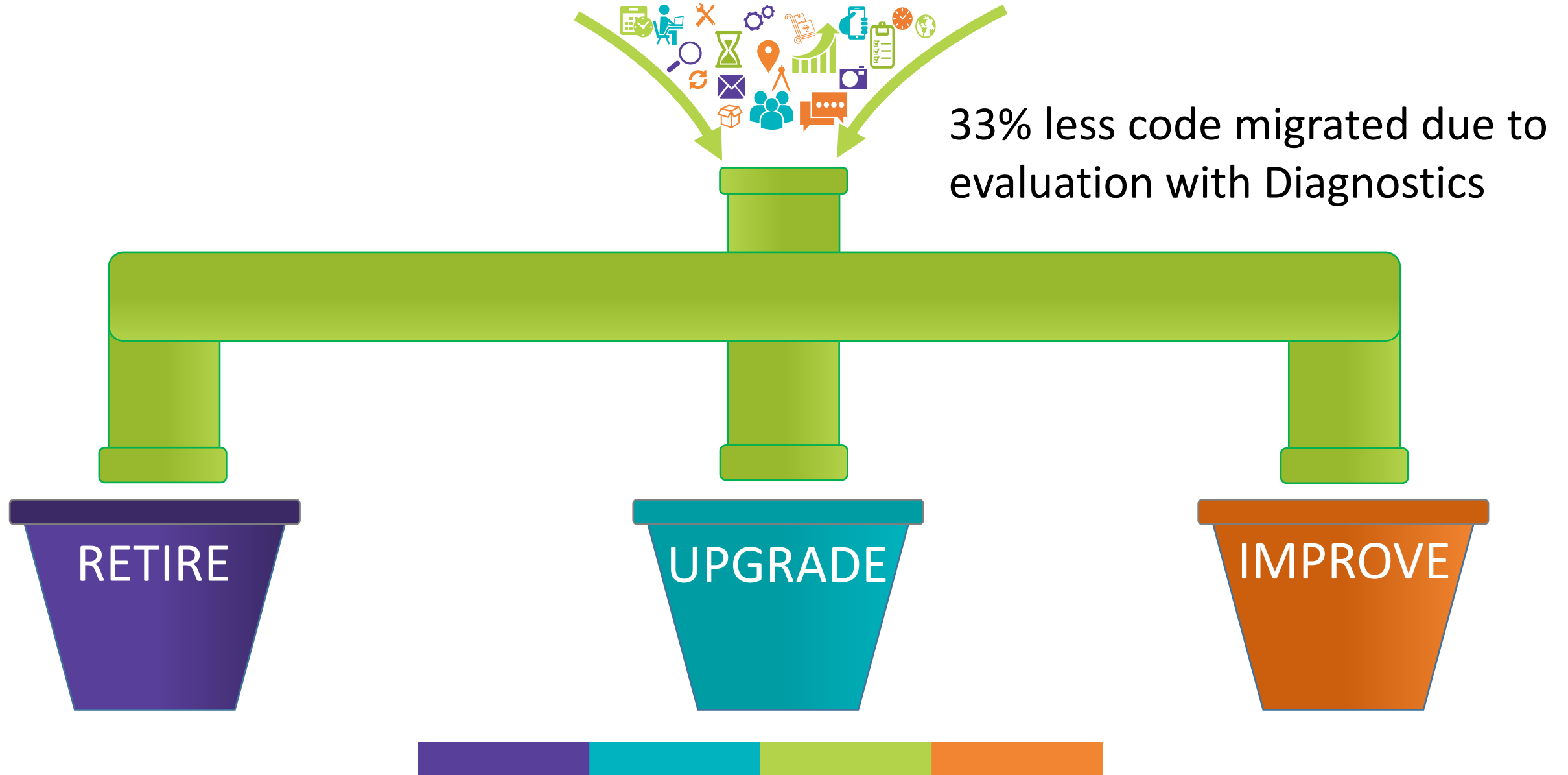
- Know which functionality should be migrated
- Control over data migration
- Control over code migration
- Control in the test environment
- Test user experience

- LATER

- Monitor IT-related aspects
- Monitor business process related aspects



Use case: system upgrade



Overview status of the Migration

Example:

4.3 production environment

Data migration

- 574.865 switches
- 72.462 transformers
- 1.374.767 cables
- 1.812 specifications
- 615 GB total

Application code migration

- 94 custom modules
- 50 CST over written methods

=

=

<> (!)

=

<

>

< (!)

5.2 development environment

Data migration

- 574.865 switches
- 72.462 transformers
- 1.374.766 cables
- 1.812 specificaties
- 588 GB totaal

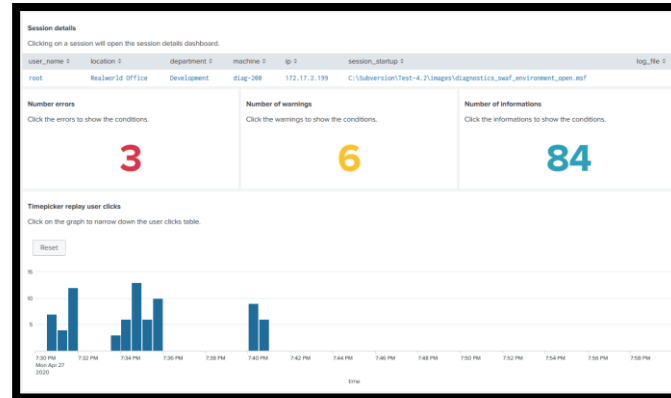
Application code migration

- 70 custom modules
- 60 CST over written methods



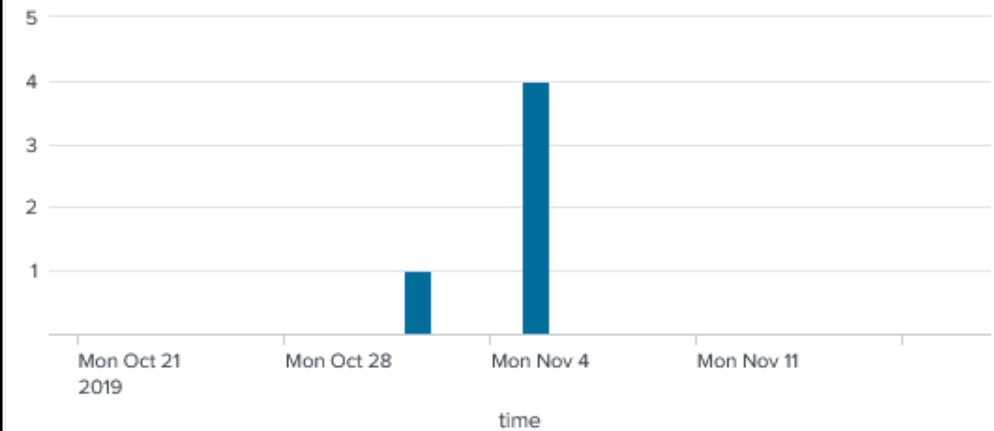
Support in the test environment

- Detection of memory leaks
- Automatic report of users errors
- Automatic traceback reports
- Profile start up application



JVM monitor alerts triggered

The JVM monitor alert triggers if the Java Virtual Machine of a SW session is using more than 50% of the tenured space after a full garbage collection. This indicates that there could be a Memory leak and that the session is about to crash.



Clicking on one of the alerts will open the JVM statistics dashboard.

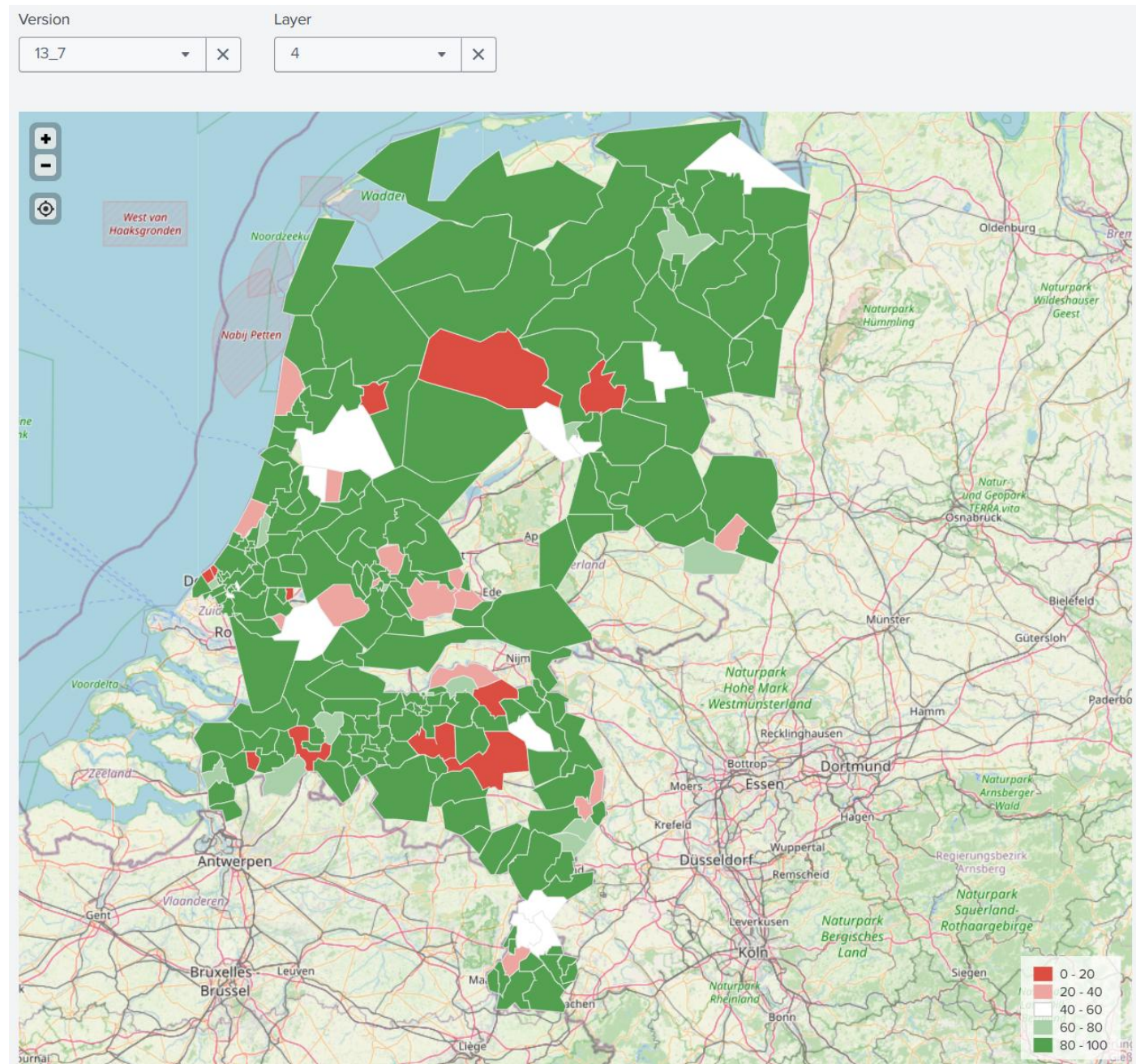
time	session_id
11/05/2019 16:10:02	27
11/05/2019 11:30:03	25
11/05/2019 11:10:02	24
11/05/2019 10:55:02	21



Overview of the migration

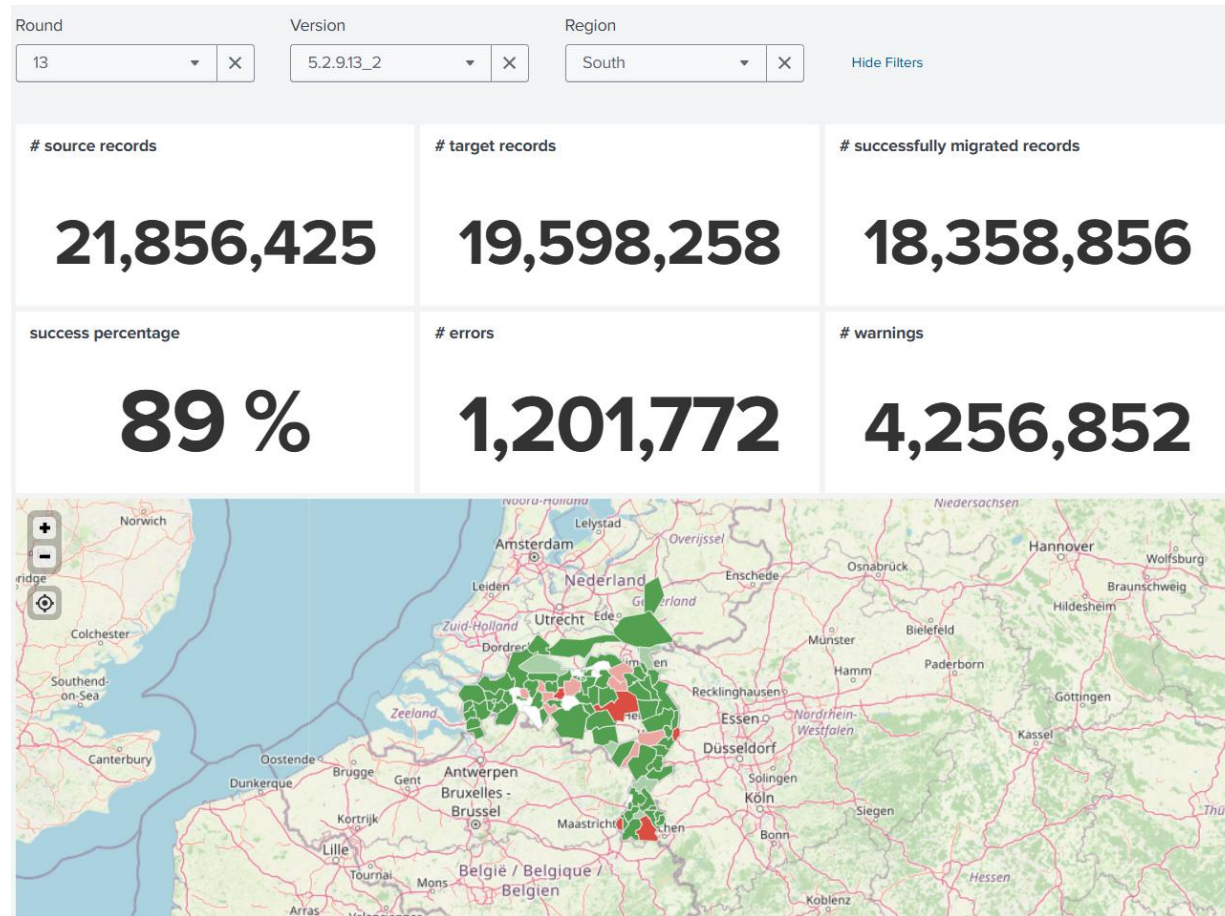
Shows an overview of the migration progress on a map per region for each round and version

From 0% to 100% of the records successfully migrated



Per round / version / region

Gives insight into the total number of source and target records, errors and progress per Region



Get error details per round

- Get a list of all errors, warnings, information's that occur
- Ability to prioritize these to resolve them
- Displays the records that had the error, warning, or information event
- Possibility to assign Jira numbers to the errors

Migration errors

Error	count	Type	Jira
**** Error: Parent issue: **** Error: Specification record not found: card(Shelf)	3923	Unknown	Unknown
There is no PNI Pin found for the found PNI Sheath Splice.	2375	Unknown	Unknown
There is no PNI Sheath Splice for the found PNI Splice Tray.	1592	Unknown	Unknown
**** Error: Specification record not found: card(Slot)	1437	Unknown	Unknown
At least one port was not migrated, did not migrate fibre_pigtail_connection to jumper.	1251	Unknown	Unknown
At least one port was not migrated, did not migrate fibre_patch to jumper.	1086	Unknown	Unknown
**** Error: Specification record not found: card(Card)	840	Unknown	Unknown
Fibre Sheath has no Sheath with Loc record in PNI.	818	Unknown	Unknown
**** Error (enumerator_value_not_found): value DBDIP-01 (65/85 MHz) not in enumerator set	545	Unknown	Unknown
Amplifier has no inserted SM_A_IN/4 rf module.	428	Unknown	Unknown

« Prev 1 2 3 4 5 6 7 8 Next »

There is no PNI Pin found for the found PNI Sheath Splice.

Region	count
Rosmalen	2375

Source_record
fibre_sheath680:(102061212)
fibre_sheath680:(102402630)
fibre_sheath680:(102402630)
fibre_sheath680:(102402630)
fibre_sheath680:(102402630)
fibre_sheath680:(102402630)
fibre_sheath680:(102402630)
fibre_sheath680:(102402630)
fibre_sheath680:(102402630)
fibre_sheath680:(102402630)



Filters, skipped records, skipped collections

Timestamp: 2025/08/13 11:12:0... Hide Filters

Total source records NLNorth	Total source records NLMiddle	Total source records NLSouth
4,249,767	6,663,501	5,145,001

Totals by main region				Filters			
Source_collection_name	Target_collection_name	Main_region_name	Filtered size	Source_collection_name	Target_collection_name	Filter	Filtered size
catv_cable	coaxial_cable	NLMiddle	2289125	trench	underground_route	((dd_conversion_search is null) or (dd_conversion_search != "Aerial Route")) and ((mmt_location within 1 pseudo_area) or ((mmt_location overlaps 1 pseudo_area) and (first_coord within 1 pseudo_area))))	11043819
copper_cable	copper_cable	NLMiddle	0	catv_cable	coaxial_cable	(using proc unnamed(p_rec))	4994329
trench	access_point	NLMiddle	6241	trench	access_point	((using proc unnamed(p_rec)) and ((dd_conversion_search is null) or (dd_conversion_search != "Aerial Route")) and ((mmt_location within 1 pseudo_area) or ((mmt_location overlaps 1 pseudo_area) and (first_coord within 1 pseudo_area))))	17861
trench	aerial_route	NLMiddle	0	copper_cable	copper_cable	(using proc unnamed(p_rec))	2259
trench	underground_route	NLMiddle	4448135	trench	aerial_route	((dd_conversion_search = "Aerial Route") and ((mmt_location within 1 pseudo_area) or ((mmt_location overlaps 1 pseudo_area) and (first_coord within 1 pseudo_area))))	1
catv_cable	coaxial_cable	NLNorth	1231432				
copper_cable	copper_cable	NLNorth	470				
trench	access_point	NLNorth	5184				
trench	aerial_route	NLNorth	0				
trench	underground_route	NLNorth	3012681				

« Prev 1 2 Next »

Source_collection_name	Number of skipped records by collection
catv_connection_cable	Click on a collection to see the skipped records below.

Get insight in all records that were skipped during the migration process

- Shows the total number of records skipped per collection
- Shows why records were skipped and what filter was used
- Lists all records that were skipped because, for example, a geometry was missing, or the geometry was not included in the area being migrated



Status of migration runs per machine

Machine	Status	Region	Version	Round	Start Time	Duration
rwmini12	realworld gelu.turtoi_15_6_rel migrate_to_5 NLMiddle 11_03_AalsAmstUithoon_p5	AalsAmstUithoon	5.2.9.15_6	0	2025/11/03 19:05:12.572	18:20:22.311
rwmini12	Migration run stopped prematurely	AalsAmstUithoon	5.2.9.15_6	0	2025/11/03 18:34:59.340	00:00:00.000
rwmini12	Migration run stopped prematurely	AalsAmstUithoon	5.2.9.15_6	0	2025/11/03 09:04:57.984	07:02:13.107
rwmini12	realworld gelu.turtoi_15_6_rel migrate_to_5 NLMiddle 11_03_AmstOuderDiemen_p5	AmstOuderDiemen	5.2.9.15_6	0	2025/11/03 19:05:39.404	18:28:58.190
rwmini12	Migration run stopped prematurely	AmstOuderDiemen	5.2.9.15_6	0	2025/11/03 18:35:24.866	00:00:00.000
rwmini12	Migration run stopped prematurely	AmstOuderDiemen	5.2.9.15_6	0	2025/11/03 09:05:24.666	07:02:13.514
rwmini17	realworld gelu.turtoi_15_6_rel migrate_to_5 NLMiddle 11_03_DenHaag1_p5	DenHaag1	5.2.9.15_6	0	2025/11/03 19:06:07.347	18:17:18.549
rwmini17	Migration run stopped prematurely	DenHaag1	5.2.9.15_6	0	2025/11/03 18:35:53.296	00:00:00.000
rwmini17	Migration run stopped prematurely	DenHaag1	5.2.9.15_6	0	2025/11/03 09:05:52.190	07:00:49.605
rwmini17	realworld gelu.turtoi_15_6_rel migrate_to_5 NLMiddle 11_03_DenHaag2_p5	DenHaag2	5.2.9.15_6	0	2025/11/03 19:06:22.419	18:17:11.201
rwmini17	Migration run stopped prematurely	DenHaag2	5.2.9.15_6	0	2025/11/03 18:36:17.828	00:00:00.000
rwmini17	Migration run stopped prematurely	DenHaag2	5.2.9.15_6	0	2025/11/03 09:06:17.128	07:00:49.494
rwws16	realworld gelu.turtoi_15_6_rel migrate_to_5 NLMiddle 11_03_DenHaag3_p5	DenHaag3	5.2.9.15_6	0	2025/11/03 19:06:48.310	18:17:15.975

Helps with tracking all running migration runs

- Display on which machines which runs are currently running
- An overview of which runs have (not) been completed successfully
- The total duration of these runs



Details of a run

Round: 0 | Version: 5.2.9.0 | Region: DeWolden | Timestamp: 2025/11/05 09:07:0... | Last 7 days

IRealworldlgelu.turtoi_2523_2|migrate_to_5|NLNorth|11_05_DeWolden

Session	Duration	# Errors	# Warnings	# Informations
Data Table Migration	03:05:35.280	0	75	661
Data Template Migration	00:28:37.235	0	0	0
Data RME Migration	01:38:46.747	219	230	71
Data Conduit Migration	01:12:22.922	28	0	0
Data Cable Migration	05:55:57.955	11	3	0
Data Connection Migration	01:08:35.987	207	1	27141
Data PRM Route Migration	00:05:59.721	6	0	0
Total	13:35:55.847	471	309	27873

[Data table migration](#) |
 [Data template migration](#) |
 [Data RME migration](#) |
 [Data conduit migration](#) |
 [Data cable migration](#) |
 [Connection migration](#) |
 [Data prm route migration](#)

Total number of source records	158,106	Total number of target records	158,106
--------------------------------	----------------	--------------------------------	----------------

- Shows the status of a run "In progress" / "Successfully completed" / "Stopped unexpectedly"
- Shows the alternative where to find the results of the run
- Provides insight into the duration of the various steps of a run and the total duration



Per run per phase per collection: how many records migrated / associated

[Data table migration](#)
[Data template migration](#)
[Data RME migration](#)
[Data conduit migration](#)
[Data cable migration](#)
[Connection migration](#)
[Data prm route migration](#)

Total number of source records						Total number of target records					
158,106						158,106					
Migration overview by collection											
Source Collection (ORCA)						Target Collection (PNI)					
All						All					
Source_collection	Target_collection	# Source records	# Target records	# migration errors	# migration warnings	# migration infos	# association errors	# association warnings	# association infos	Time taken for migration	Time taken for association
orca_dimensioning_component	vfz_dimensioning_component	49982	49982	0	0	0	0	0	0	00:08:59	
orca_dimensioning	vfz_dimensioning	46479	46479	0	0	0	0	0	0	00:06:27	00:19:09
trench	underground_route	29391	29391	0	0	0	0	0	0	00:22:32	00:01:31
catv_connection_box	access_point	8692	8692	0	0	70	0	0	0	00:03:19	00:00:47
catv_connection_box	nid	8692	8692	0	0	0	0	37	0	00:01:28	00:19:12
trench_change	point_of_interest	4330	4330	0	0	432	0	0	0	00:02:06	00:00:17
protection_pipe	mit_conduit	2168	2168	0	0	0	0	0	0	00:00:31	00:20:15
trench_joint	point_of_interest	1289	1289	0	0	135	0	0	0	00:00:48	00:00:05
catv_multitap	tap	1213	1213	0	0	0	0	0	0	00:02:21	00:00:57
cabinet	mit_terminal_enclosure	964	964	0	5	0	0	0	0	00:02:39	00:00:19
pipe_cap	conduit_adapter	612	612	0	1	0	0	0	0	00:00:08	00:00:38
pipe_cap	point_of_interest	612	612	0	0	13	0	0	0	00:00:20	00:00:02
catv_terminator_resistance	terminator	596	596	0	0	0	0	0	0	00:00:03	00:00:05
catv_splice	coaxial_splice	589	589	0	0	0	0	0	0	00:00:10	00:00:06
catv_end_amplifier	amplifier	401	401	0	0	0	0	0	0	00:00:50	00:00:50
cross_section	mit_presentation_object	372	372	0	0	0	0	0	0	00:01:31	00:00:35
catv_splitter	coaxial_splitter	295	295	0	0	0	0	0	0	00:00:08	00:00:03
catv_reel	point_of_interest	232	232	0	0	11	0	0	0	00:00:11	00:00:01

Gives insights into the total number of source and target records, errors and progress by source/target collection per phase of a run



See all errors / warnings and which records

Migration errors for "fibre_patch" to "jumper"

Click on an error to see the records below.

Errors ↕	count ↕	Type ↕	Jira ↕
At least one port was not migrated, did not migrate fibre_patch to jumper.	183	Unknown	Unknown

Records with: At least one port was not migrated, did not migrate fibre_patch to jumper.

Source_record ↕
fibre_patch599:(1783142239)
fibre_patch599:(1783142240)
fibre_patch599:(2055886826)
fibre_patch599:(2055886827)
fibre_patch599:(2151503329)
fibre_patch599:(2151503330)
fibre_patch599:(2151592368)
fibre_patch599:(2151592369)
fibre_patch599:(2527999444)
fibre_patch599:(2527999445)

- Get a list of all errors / warnings / information's that occur in a run
- Ability to prioritize these to resolve them
- Displays the records that had the error, warning, or information event



Verify the migration

Round		Version		Hide Filters							
13	X	5.2.9.13_5	X	Source_collection ⇅	Target_collection ⇅	Total_number_source_records ▼	Total_number_successfully_migrated_records ⇅	Errors ⇅	Progress ⇅	Accepted ⇅	toggle ⇅
catv_cable		coaxial_cable		55832	55705	127	99.77 %	Not yet	Accept		
trench		underground_route		48373	48373	0	100.00 %	Not yet	Accept		
orca_dimensioning_component		vfz_dimensioning_component		43025	43025	0	100.00 %	Not yet	Accept		
orca_dimensioning		vfz_dimensioning		36916	36916	0	100.00 %	Not yet	Accept		
catv_connection_box		access_point		17413	17413	0	100.00 %	Not yet	Accept		
catv_connection_box		nid		17413	17413	0	100.00 %	Not yet	Accept		
catv_connection_cable		coaxial_port_connection		7805	7581	224	97.13 %	Not yet	Accept		
fibre_sheath		sheath_with_loc		7788	7634	154	98.02 %	Not yet	Accept		
catv_terminator_resistance		terminator		5383	5383	0	100.00 %	Not yet	Accept		
port		mit_rme_port		4371	205	4166	4.69 %	Not yet	Accept		
patch_port		mit_rme_port		3264	652	2612	19.97 %	Not yet	Accept		
trench_change		point_of_interest		3084	3084	0	100.00 %	Not yet	Accept		
pipe_cap		conduit_adapter		2065	2065	0	100.00 %	Not yet	Accept		
pipe_cap		point_of_interest		2065	2065	0	100.00 %	Not yet	Accept		
catv_multitap		tap		1925	1925	0	100.00 %	Not yet	Accept		
cross_section		mit_presentation_object		1904	1904	0	100.00 %	Not yet	Accept		
pipe		mit_conduit		1735	1440	295	82.99 %	Not yet	Accept		
card		mit_slot		1652	92	1560	5.56 %	Not yet	Accept		
protection_pipe		mit_conduit		1538	1536	2	99.86 %	Not yet	Accept		

Gives the ability to mark a source/target collection as accepted for migration



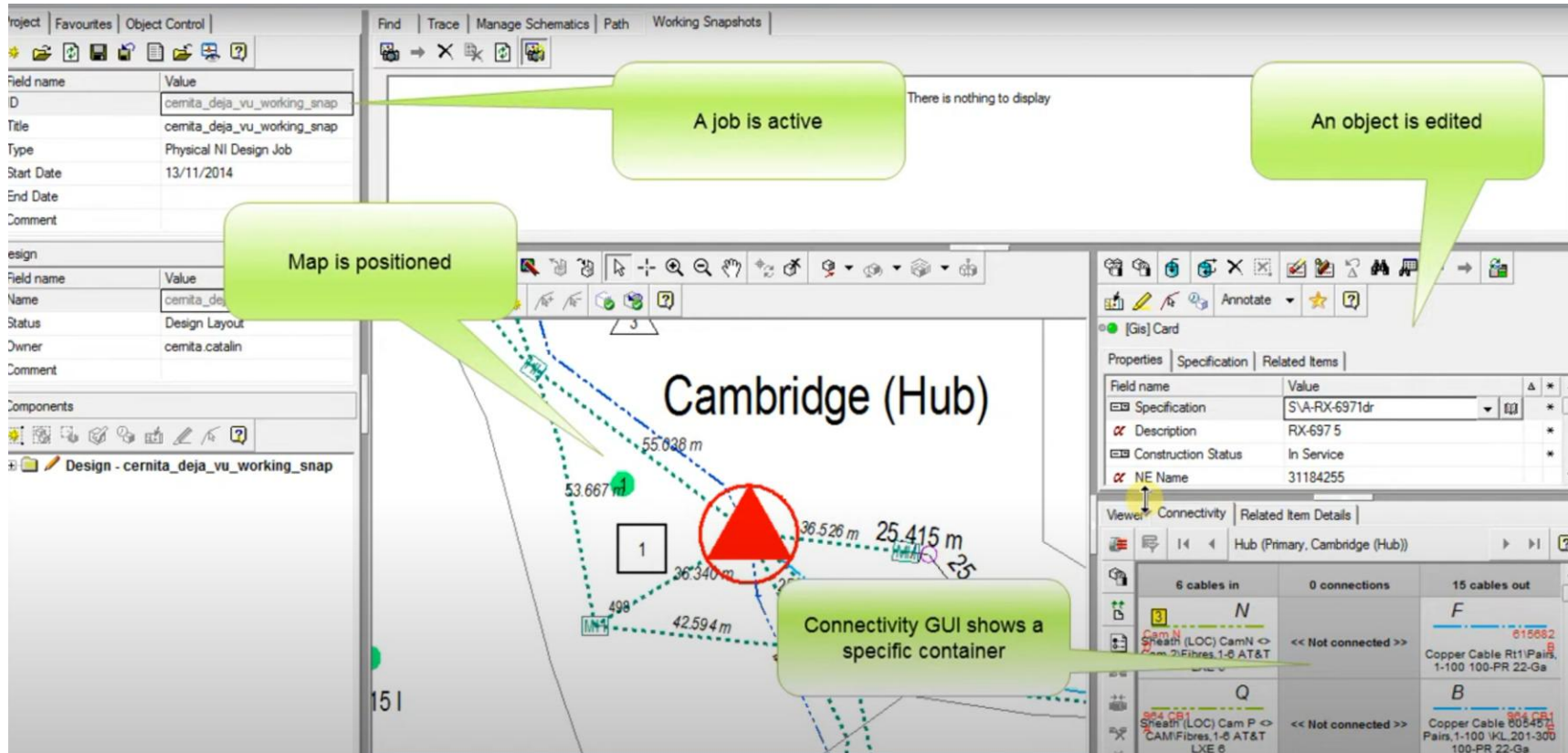
Diagnostics

Roadmap items



Snapshots for support

PNI Working Snapshots



The screenshot displays a software interface for network design. On the left, there are two panels for job and design information. The top panel shows job details for 'cernita_deja_vu_working_snap', including its ID, title, type (Physical NI Design Job), start date (13/11/2014), and end date. The bottom panel shows design details for 'Design - cernita_deja_vu_working_snap', including name, status (Design Layout), owner (cernita.catalin), and comment. The central area is a map titled 'Cambridge (Hub)' showing a network topology with various nodes and connections, including distances like 55.038 m, 53.667 m, 36.526 m, 25.415 m, 36.340 m, 42.594 m, and 498. A red triangle highlights a specific node. On the right, a 'Connectivity' panel shows a table of connections for a 'Hub (Primary, Cambridge (Hub))'.

View	Connectivity	Related Item Details
14	Hub (Primary, Cambridge (Hub))	
	6 cables in	0 connections
	15 cables out	
	N	F
	<< Not connected >>	<< Not connected >>
	Q	B
	<< Not connected >>	<< Not connected >>

Callouts in the image:

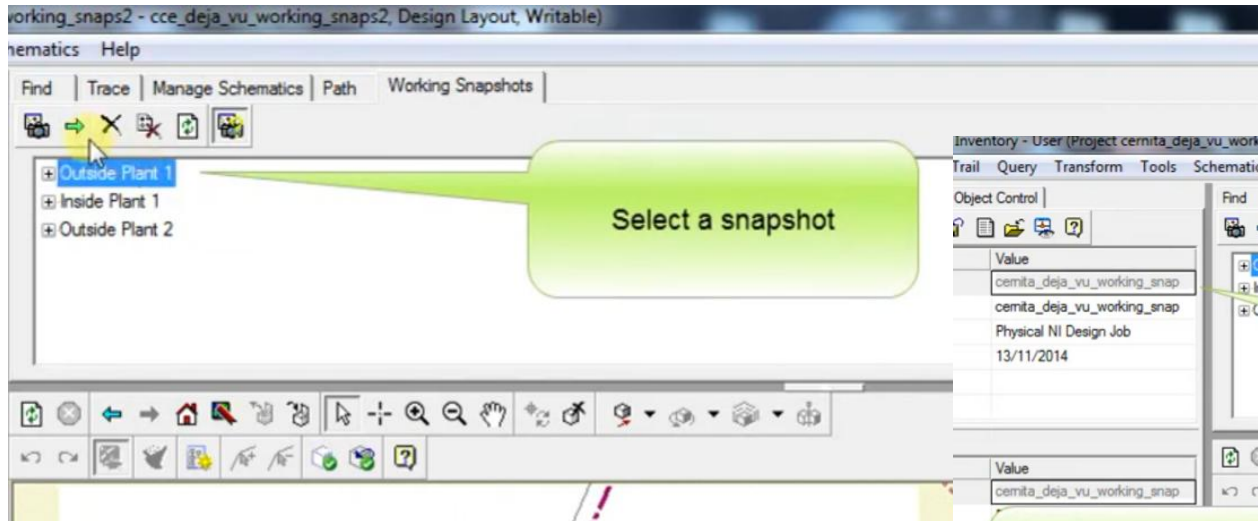
- A job is active**: Points to the job information panel.
- An object is edited**: Points to the connectivity table.
- Map is positioned**: Points to the map area.
- Connectivity GUI shows a specific container**: Points to the connectivity table.

And export the snapshot as PFD or XML

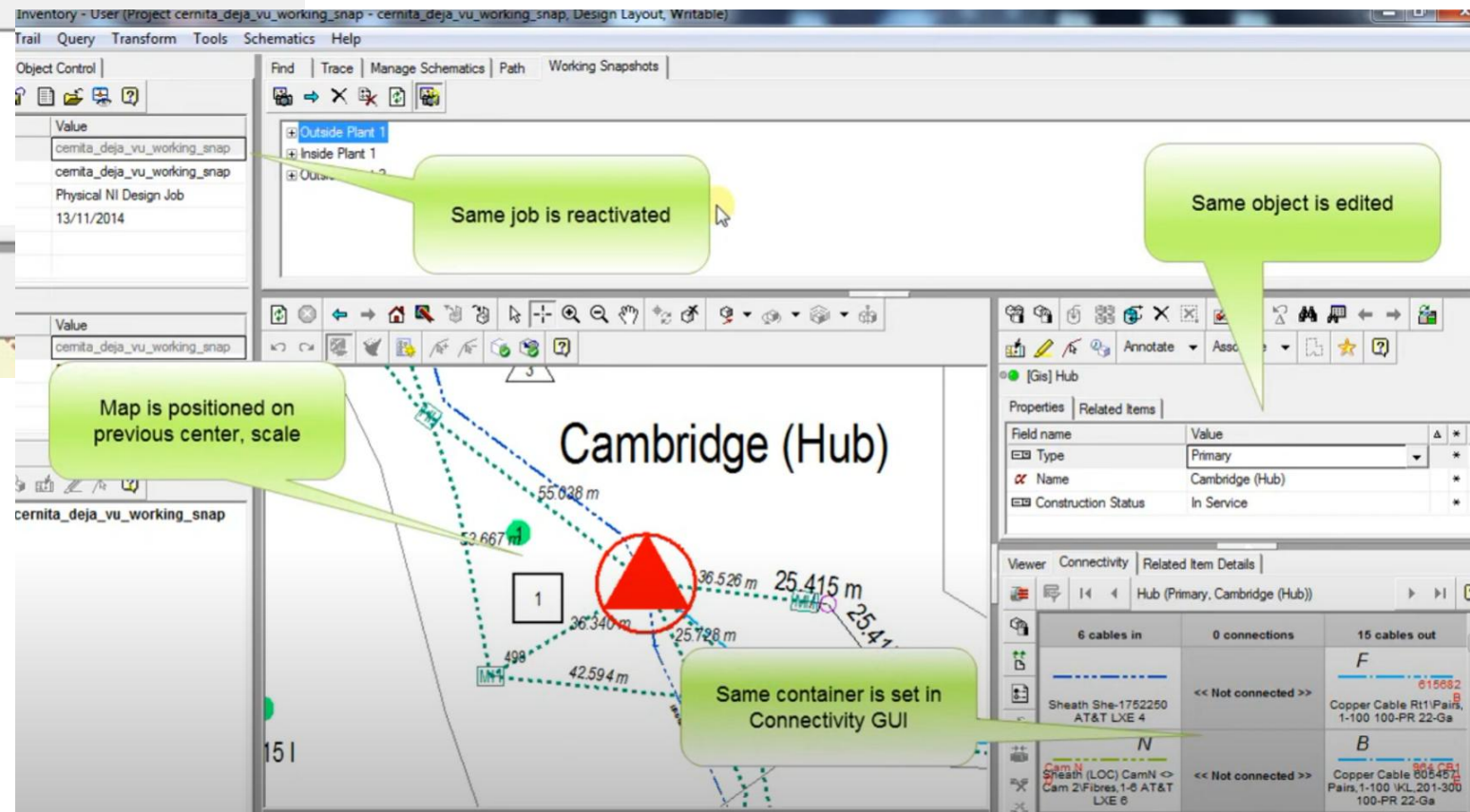


Restore to a snapshot

Select the snapshot

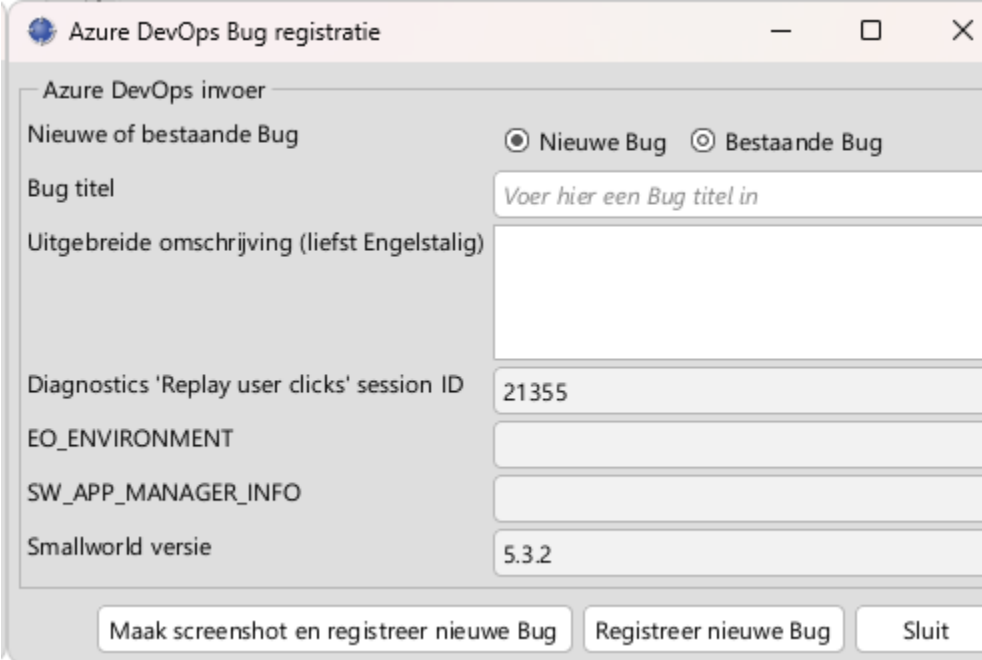


Restore to the snapshot



Create tickets from Smallworld

Create and update tickets directly from Smallworld in your ticketing system



Azure DevOps Bug registratie

Azure DevOps invoer

Nieuwe of bestaande Bug Nieuwe Bug Bestaande Bug

Bug titel

Uitgebreide omschrijving (liefst Engelstalig)

Diagnostics 'Replay user clicks' session ID

EO_ENVIRONMENT

SW_APP_MANAGER_INFO

Smallworld versie

Maak screenshot en registreer nieuwe Bug Registreer nieuwe Bug Sluit

Add screenshots & Diagnostics info to your tickets



Chatbot in Smallworld



Smallworld Network Inventory - Physical Network Inventory User

File Edit View Trail Query Transform Tools Schematics Layout Help pni_gui_chatbot

Project Favourites Object Control

1:1250

Datasets Themes

- 7 Gis (Smallworld Datasore)
- Design_admin (Smallworld Datasore)
- 5 Google Maps(TM) (Universal Dataset)
- Uds_schematics (Universal Dataset)
- Swdp_schematics ()
- Replica_schematic_public_manager ()

Find Trace Manage Schematics Path Diversity Checker Selected Geometries Thematics Chat Assistance

How do I connect a customer to fibre?

I detect that you have currently selected 1 object(s), including: Address

Is there any information you want to add to your question to make my answer more accurate?

(select all that apply)

- Object type: address
- It's function.
- The 8 object fields that Address has.

Submit

Thank you for your question! Here are the answers to both topics you mentioned:

****Option A: How to connect a customer to fibre****

Type your message here...

Send

Enter an Object Collection

Addresses

[Gis] Address

Field name	Value
Name	
Type	Residential
Address Num...	18
Unit Number	

Viewer Connectivity Related Item Details

Address

1:237

Segment length Segment bearing X coordinate Y coordinate Trail length Trail area 1:795 1:1250

Nothing selected

Centre: 461259.121, 152315.804 m

Diagnostics

Bringing Insight Out

