Semarchy

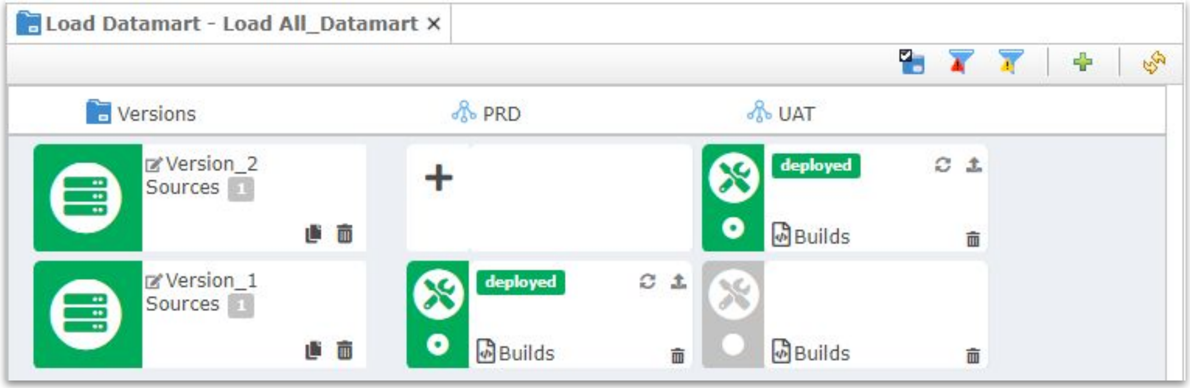
xDI DEV

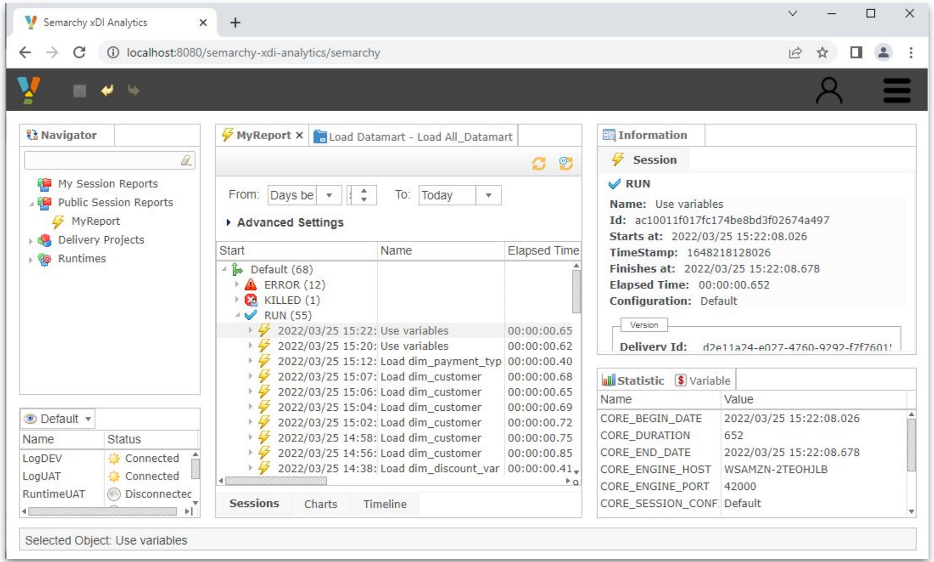
xDI Analytics

xDI Analytics

The Analytics tool enables to :

- Manage a deployment to put into production
  - ✓ Import, Configure & Deploy
- Manage the schedule of the deliveries executions
- Follow the daily executions
- Manage the planning of the log database purges





Name	Status
LogDEV	Connected
LogUAT	Connected
RuntimeUAT	Disconnectec

From: Days be To: Today

Start	Name	Elapsed Time
Default (68)		
ERROR (12)		
KILLED (1)		
RUN (55)		
2022/03/25 15:22:	Use variables	00:00:00.65
2022/03/25 15:20:	Use variables	00:00:00.62
2022/03/25 15:12:	Load dim_payment_typ	00:00:00.40
2022/03/25 15:07:	Load dim_customer	00:00:00.68
2022/03/25 15:06:	Load dim_customer	00:00:00.65
2022/03/25 15:04:	Load dim_customer	00:00:00.69
2022/03/25 15:02:	Load dim_customer	00:00:00.72
2022/03/25 14:58:	Load dim_customer	00:00:00.75
2022/03/25 14:56:	Load dim_customer	00:00:00.85
2022/03/25 14:38:	Load dim_discount_var	00:00:00.41

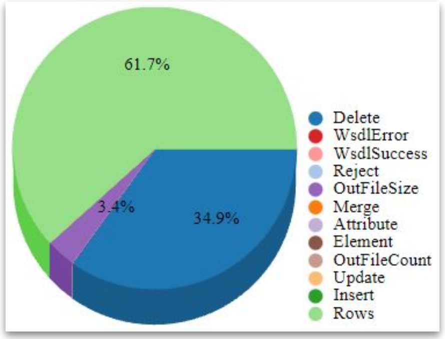
RUN

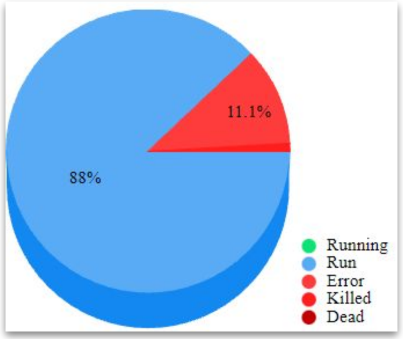
Name: Use variables
Id: ac10011f017fc174be8bd3f02674a497
Starts at: 2022/03/25 15:22:08.026
TimeStamp: 1648218128026
Finishes at: 2022/03/25 15:22:08.678
Elapsed Time: 00:00:00.652
Configuration: Default

Delivery Id: d2e11a24-e027-4760-9292-f7f7601!

Name	Value
CORE_BEGIN_DATE	2022/03/25 15:22:08.026
CORE_DURATION	652
CORE_END_DATE	2022/03/25 15:22:08.678
CORE_ENGINE_HOST	WSAMZN-2TEOHJLB
CORE_ENGINE_PORT	42000
CORE_SESSION_CONF	Default

Selected Object: Use variables





I-Stambia Analytics

- Web Service

Semarchy

xDI DEV

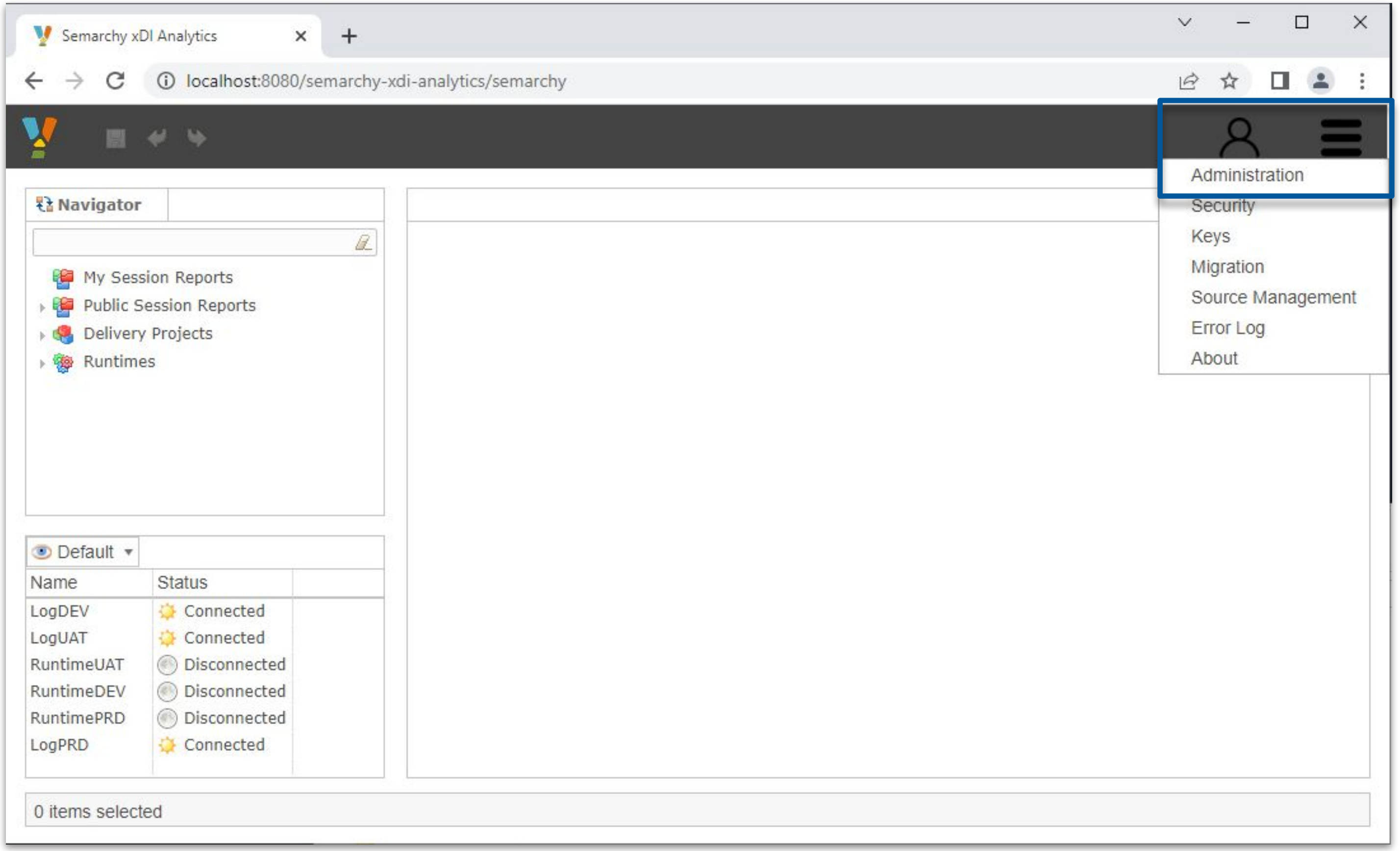
xDI Analytics

I1 - Administration

Administrate xDI Analytics

Once xDI Analytics installed, the first operation:

- Administrate the application

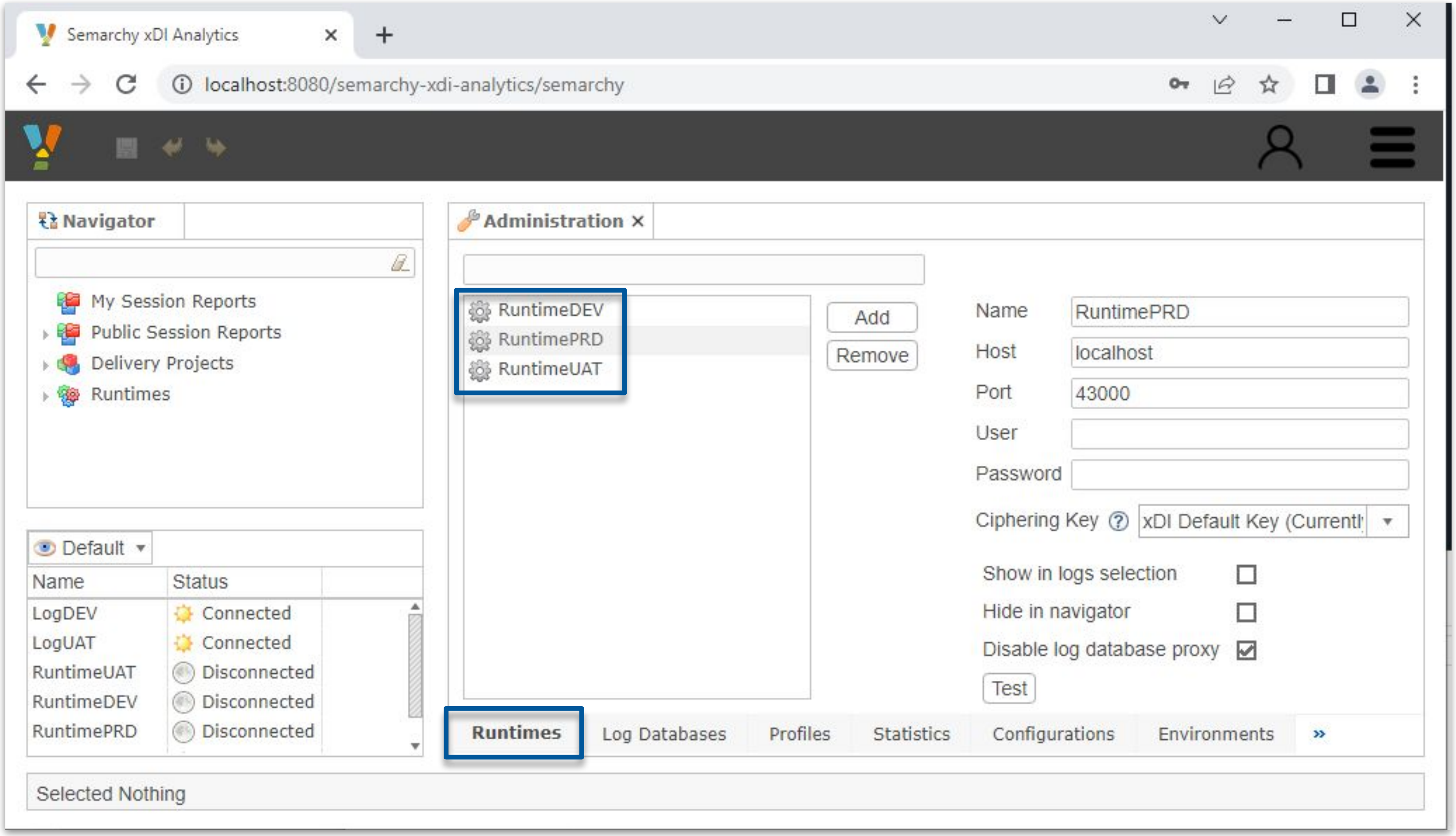


Name	Status
LogDEV	Connected
LogUAT	Connected
RuntimeUAT	Disconnected
RuntimeDEV	Disconnected
RuntimePRD	Disconnected
LogPRD	Connected

0 items selected

Administrate xDI Analytics – the engines

1. To begin the administration, define the *runtimes* to use



Default

Name	Status
LogDEV	Connected
LogUAT	Connected
RuntimeUAT	Disconnected
RuntimeDEV	Disconnected
RuntimePRD	Disconnected

Name: RuntimePRD

Host: localhost

Port: 43000

User:

Password:

Ciphering Key: xDI Default Key (Currentl

Show in logs selection □

Hide in navigator □

Disable log database proxy ☑

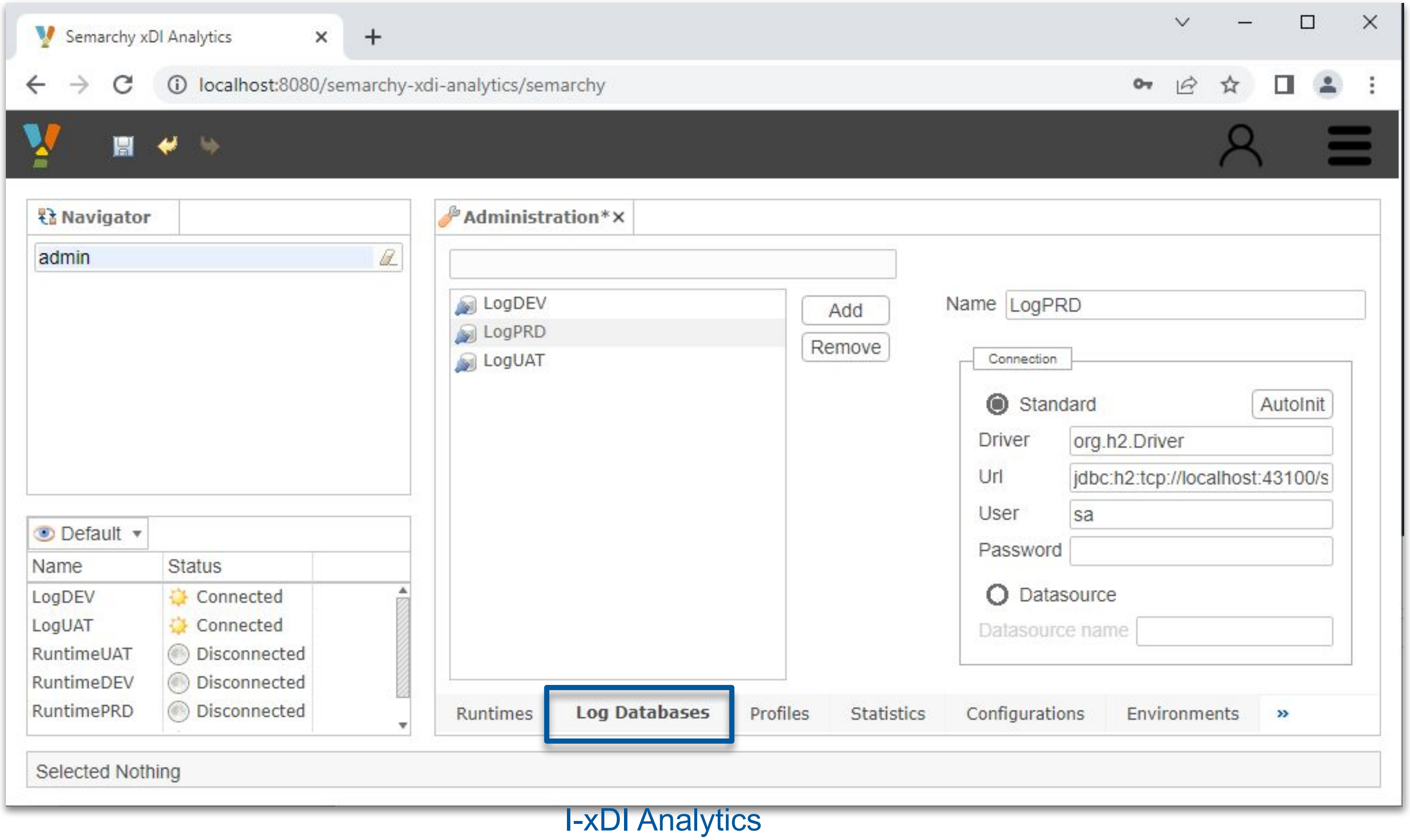
Selected Nothing

Administrate xDI Analytics – the log databases

2. Define the *log databases* to use

The xDI *log databases* store all the execution sessions of mappings and processes

By default, the log database is an H2 database



admin

LogDEV
LogPRD
LogUAT

Name LogPRD

Connection

● Standard

Driver	org.h2.Driver
Url	jdbc:h2:tcp://localhost:43100/s
User	sa
Password	

○ Datasource

Datasource name

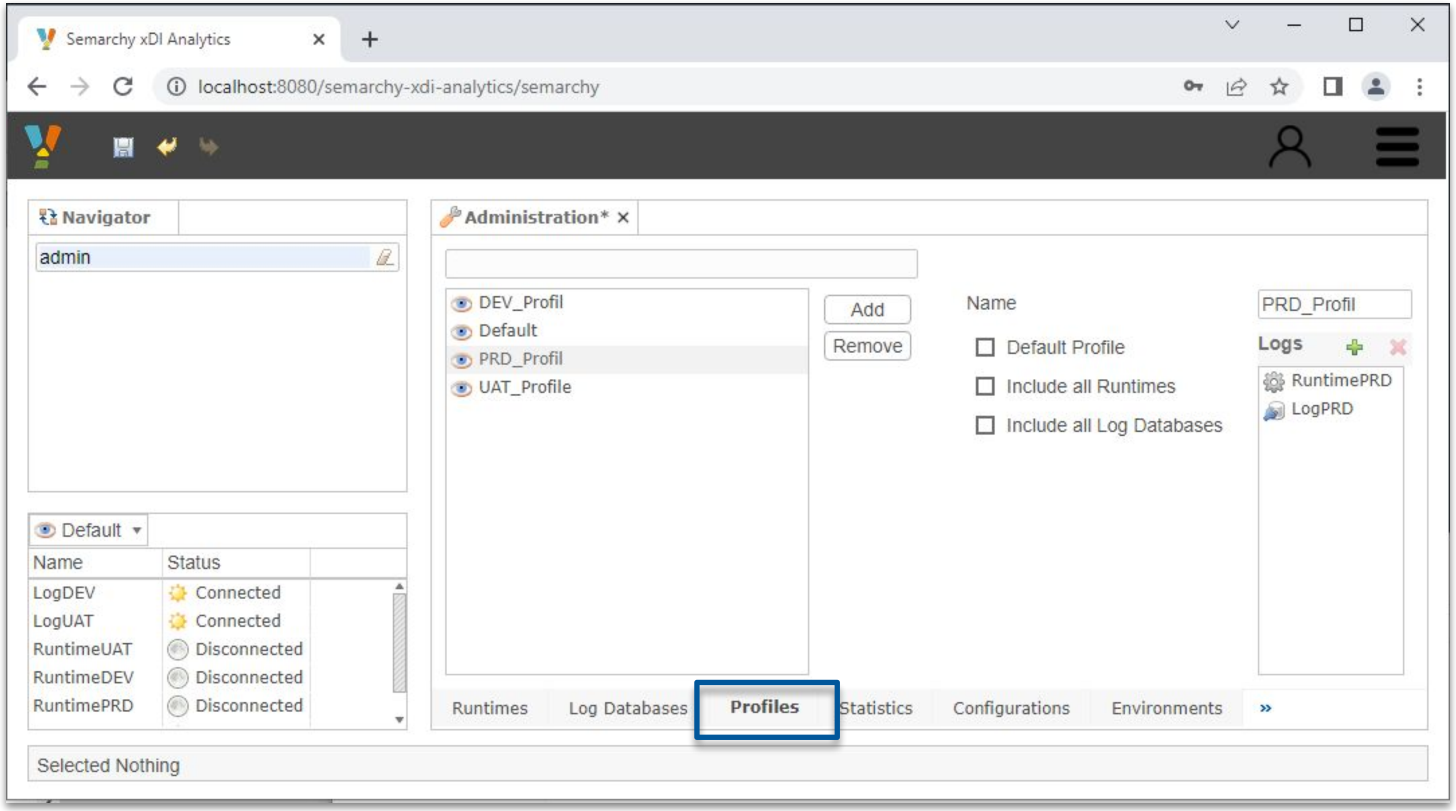
Name	Status
LogDEV	Connected
LogUAT	Connected
RuntimeUAT	Disconnected
RuntimeDEV	Disconnected
RuntimePRD	Disconnected

Selected Nothing

Administrate xDI Analytics – the profiles

3. Define the *profiles*

A *profile* is a named placeholder to define profile types in xDI Analytics
Each profile can have a view on different lists of runtimes/log databases



DEV_Profil
Default
PRD_Profil
UAT_Profile

Name: PRD_Profil

□ Default Profile

□ Include all Runtimes

□ Include all Log Databases

Logs
RuntimePRD
LogPRD

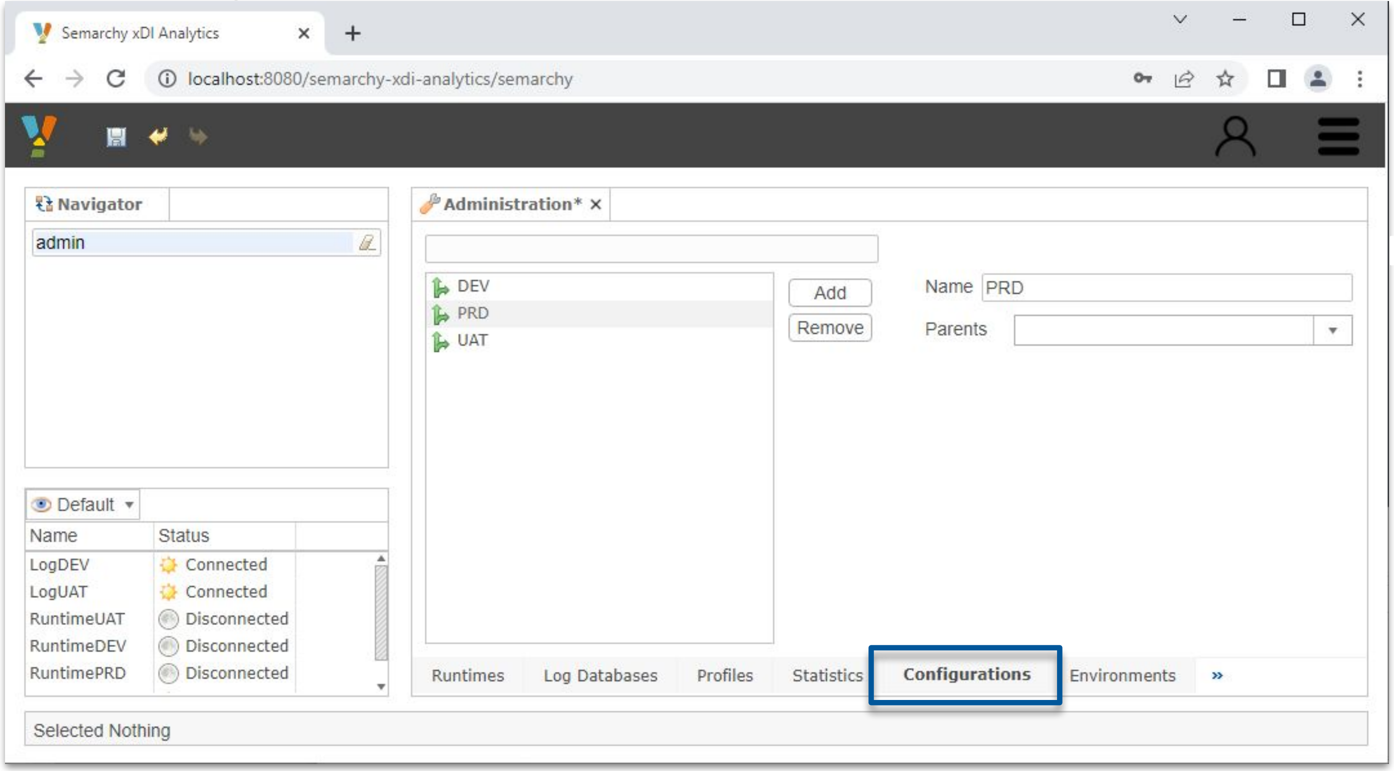
Default

Name	Status
LogDEV	Connected
LogUAT	Connected
RuntimeUAT	Disconnected
RuntimeDEV	Disconnected
RuntimePRD	Disconnected

Selected Nothing

Administrate xDI Analytics : the configurations

4. Create the necessary target *configuration(s)*
   A *configuration* is a named placeholder in which values of each externalized properties of Metadatas included in imported Packages are stored
   For instance a "UAT" configuration will store all Metadata values related to the «UAT» environment



Semarchy xDI Analytics

localhost:8080/semarchy-xdi-analytics/semarchy

Navigator: admin

Administration*

DEV
PRD
UAT

Add | Remove

Name: PRD

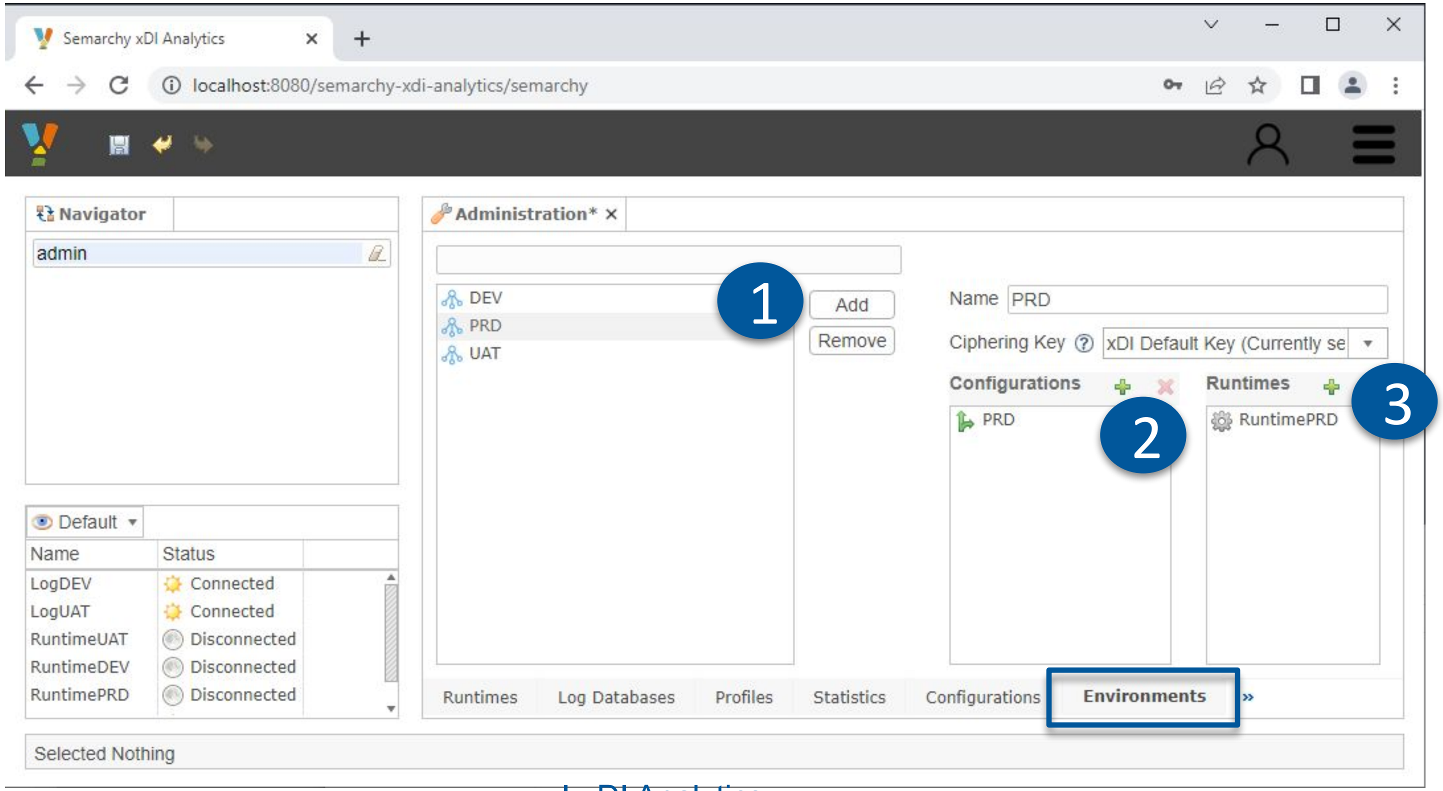
Parents:

Name	Status
LogDEV	Connected
LogUAT	Connected
RuntimeUAT	Disconnected
RuntimeDEV	Disconnected
RuntimePRD	Disconnected

Selected Nothing

Administrate xDI Analytics : the environments

5. Create the *environments* and describe them by referencing the related configuration(s) and runtime(s)
   An *environment* defines the configurations to apply and target runtimes for deployments on that environment



Name: PRD

Ciphering Key: xDI Default Key (Currently se

Configurations	Runtimes
PRD	RuntimePRD

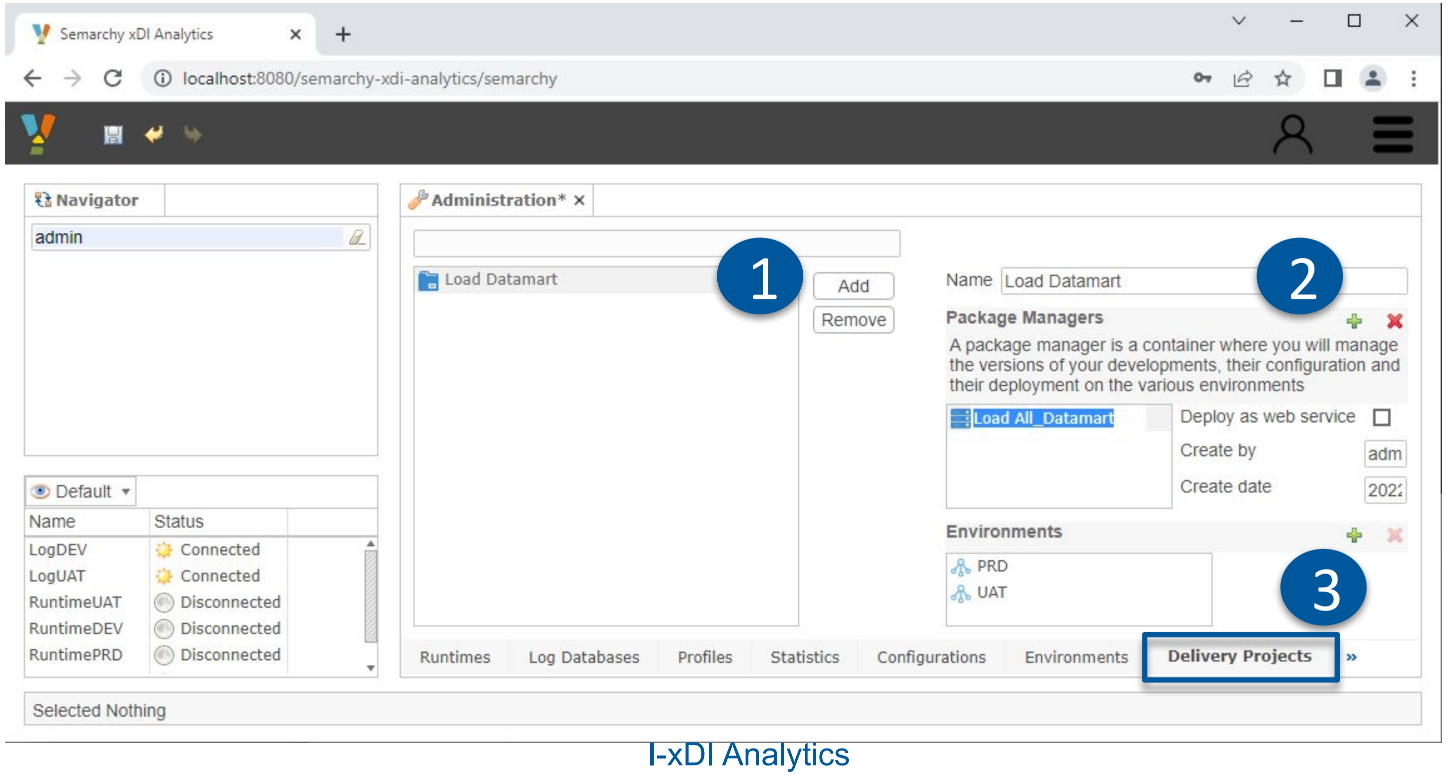
Name	Status
LogDEV	Connected
LogUAT	Connected
RuntimeUAT	Disconnected
RuntimeDEV	Disconnected
RuntimePRD	Disconnected

Administrate xDI Analytics : the delivery projects

6. Create the *delivery projects* for all your deployment use cases & add the necessary Package Managers

   A *delivery project* is a logical group of packages sharing the same deployment configurations

   A *package manager* is a logical placeholder for a set of Processes



Navigator

admin

Default

Name	Status
LogDEV	Connected
LogUAT	Connected
RuntimeUAT	Disconnected
RuntimeDEV	Disconnected
RuntimePRD	Disconnected

Administration*

Load Datamart

Add

Remove

Name: Load Datamart

Package Managers

A package manager is a container where you will manage the versions of your developments, their configuration and their deployment on the various environments

Load All_Datamart

Deploy as web service □

Create by: adm

Create date: 202

Environments

PRD

UAT

Runtimes | Log Databases | Profiles | Statistics | Configurations | Environments | **Delivery Projects** | »

Selected Nothing

- Web Service

xDI DEV

xDI Analytics

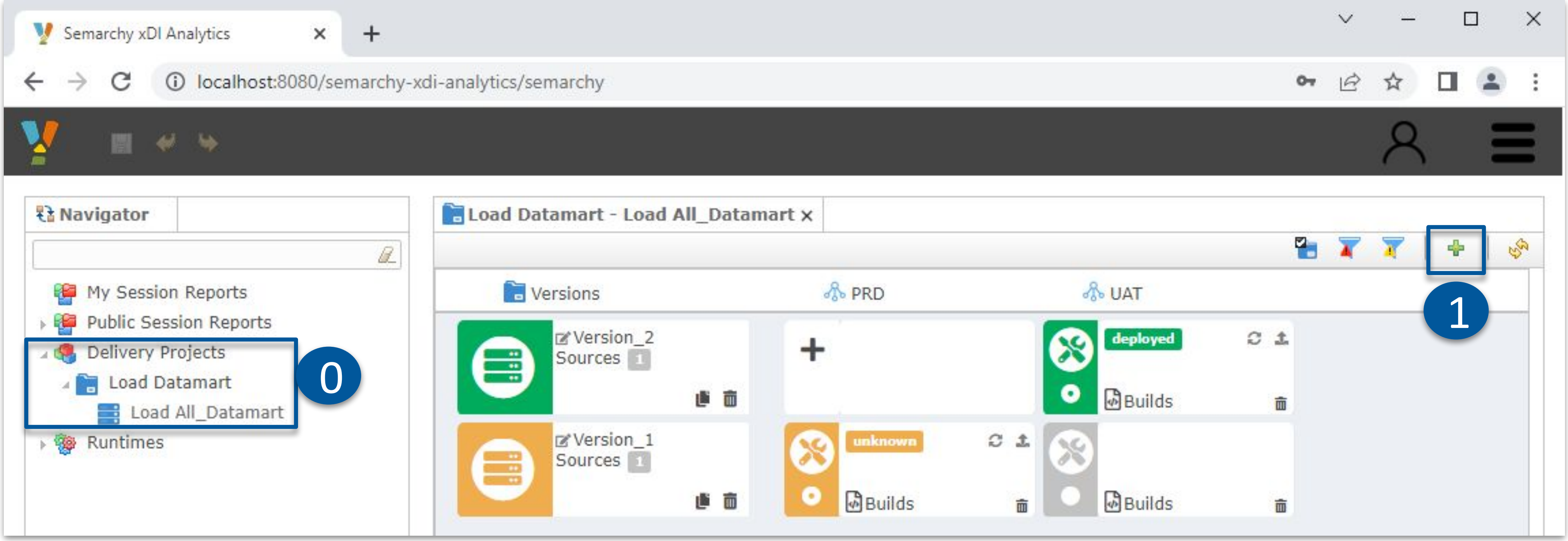
I2 - Deployment

Deploy your packages in a Runtime

To deploy a process into a Runtime

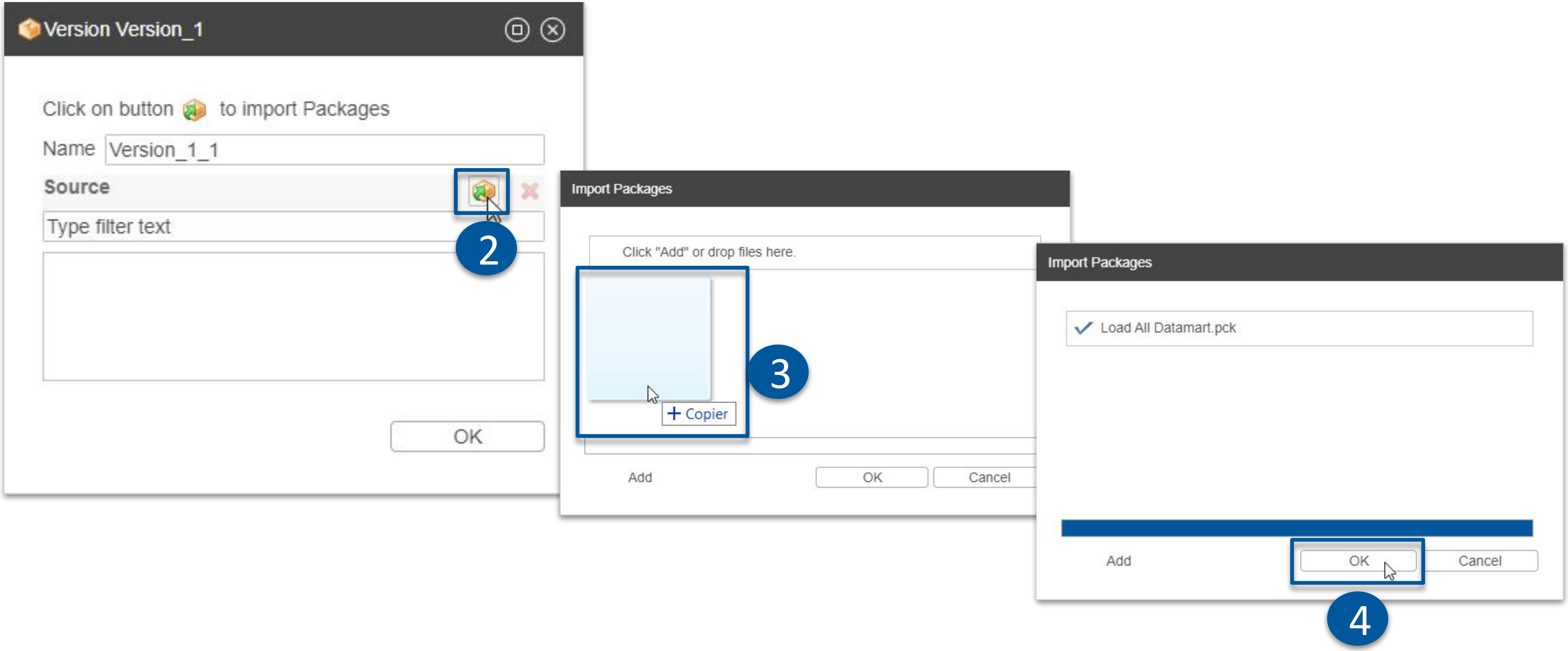
0. open the Delivery Projects/package from the navigator view
1. create a new Version

A *deployment* consist in the configuration of metadata values for a package version & a target environment



Name the version & import your packages

The *package version* stands for a given version of the package

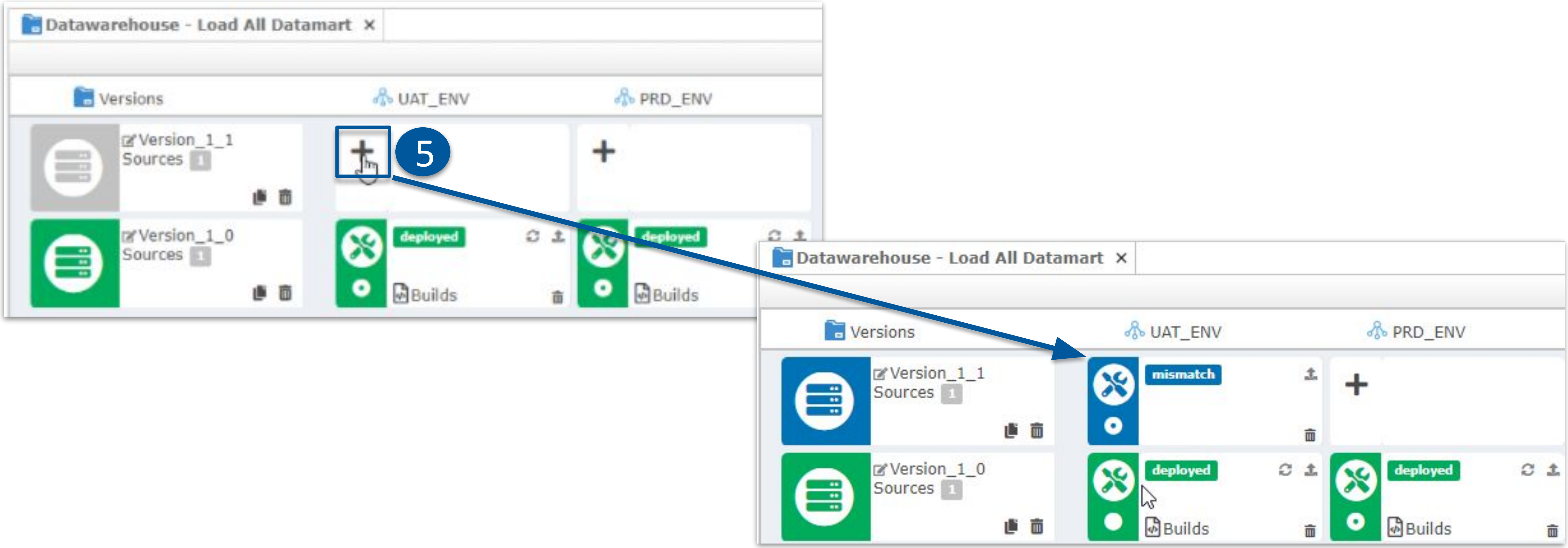


Name: Version_1_1

✓ Load All Datamart.pck

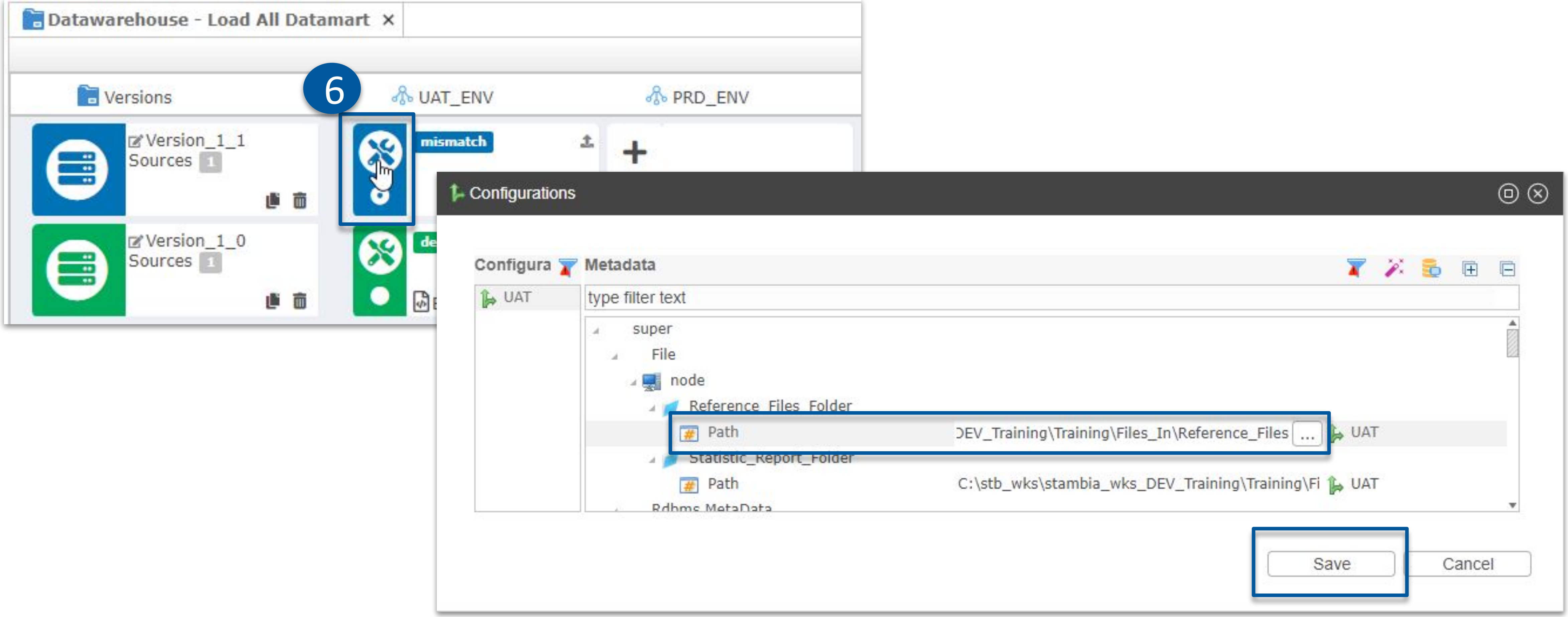
Create a version for an environment

Once the package imported, a version must be created for each environment



Set / change the metadata values

Metadata properties values must be defined/updated

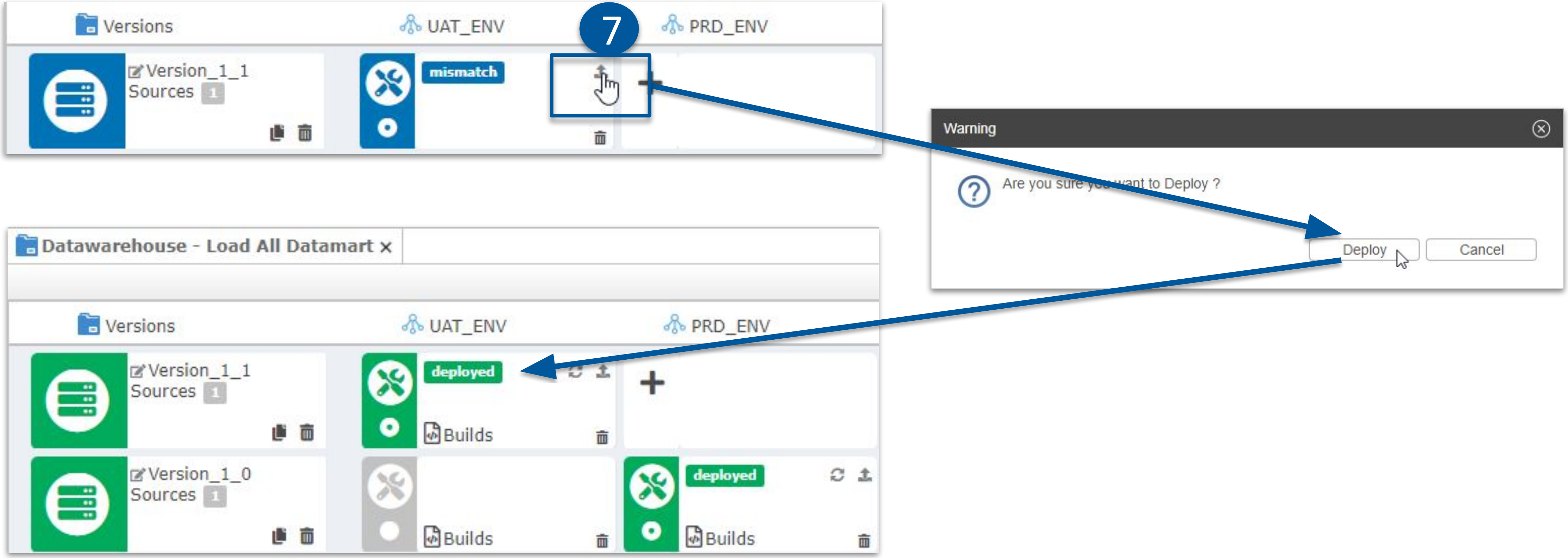


Path DEV_Training\Training\Files_In\Reference_Files UAT

Path C:\stb_wks\stambia_wks_DEV_Training\Training\Fi UAT

Build and deploy your delivery

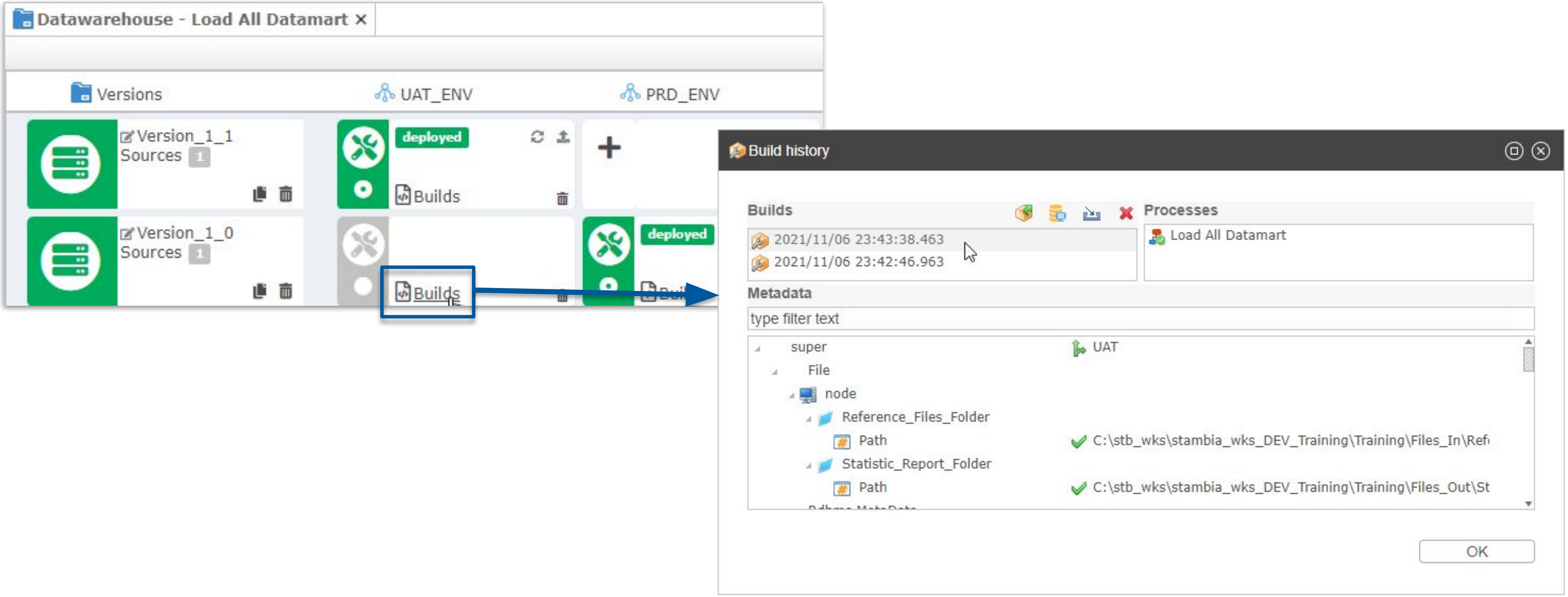
Click on the deploy button to build and deploy your delivery on the Runtime



Are you sure you want to Deploy ?

Restore previous builds / configurations

A previous build can restore as it was or using the updated configuration values



Build history

Builds:
- 2021/11/06 23:43:38.463
- 2021/11/06 23:42:46.963

Processes: Load All Datamart

Metadata: type filter text

```
super                                   UAT
  File
    node
      Reference_Files_Folder
        Path                            C:\stb_wks\stambia_wks_DEV_Training\Training\Files_In\Ref
      Statistic_Report_Folder
        Path                            C:\stb_wks\stambia_wks_DEV_Training\Training\Files_Out\St
```

xDI Analytics deployment API

Deployments through xDI Analytics can be managed using the REST deployment API to:

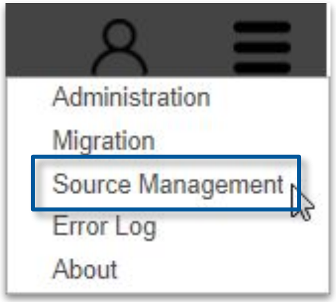
- Create the package items within existing delivery projects
- Import .pck source files to packages
- Build and deploy packages

Basics locations summarized to access the different APIs and descriptions:

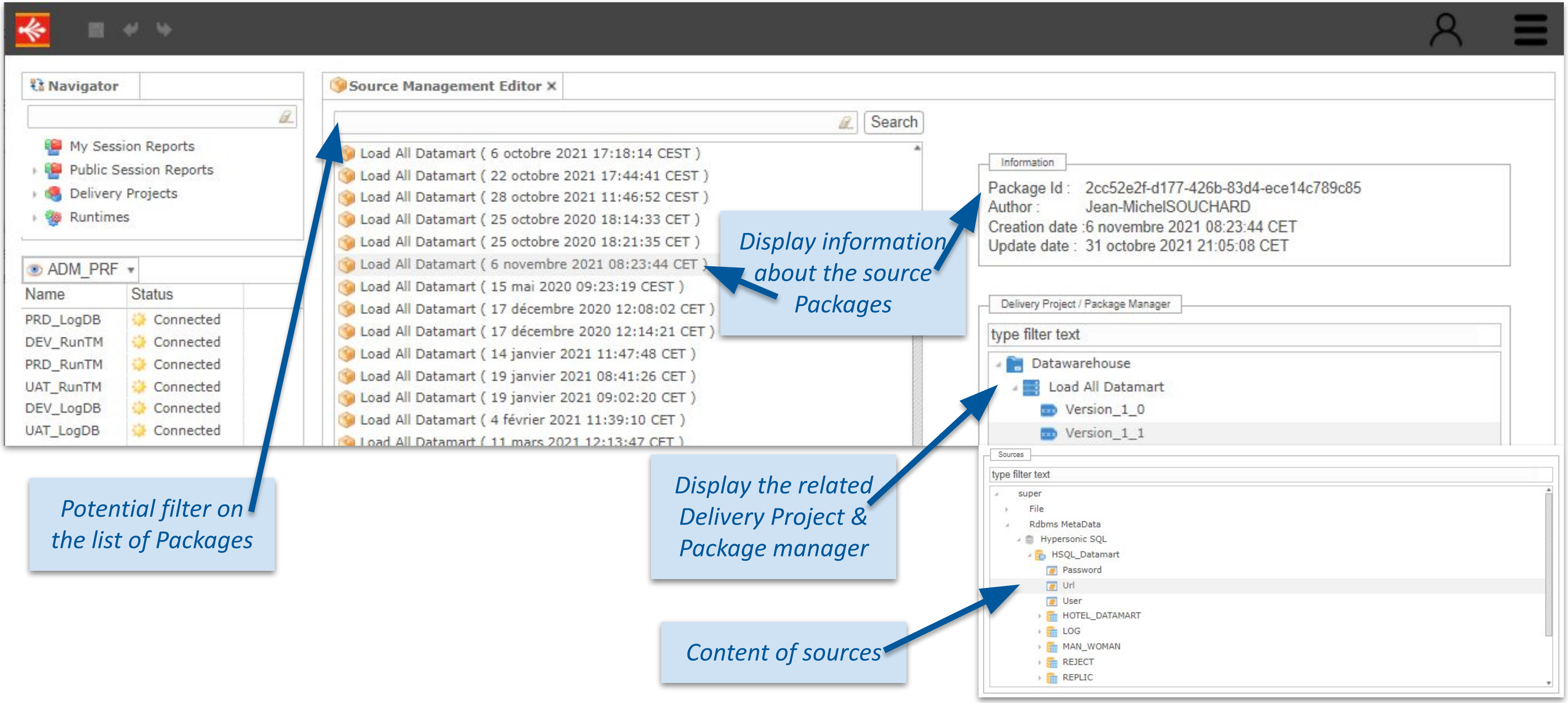
Name	Description	Value	Example
Base URL	Analytics REST APIs' base URL for operations	<application_base_url>/analytics/services/api/2	http://localhost:8080/analytics/services/api/2
Swagger2 Descriptor	Analytics REST APIs' Swagger2 descriptor file	<application_base_url>/analytics/services/swagger.yaml	http://localhost:8080/analytics/services/swagger.yaml
Swagger-UI	Analytics is exposing the Swagger-UI tool to play with the API using the Swagger2 descriptor	<application_base_url>/analytics/swagger-ui/api/2	http://localhost:8080/analytics/swagger-ui/api/2
Postman collection	A sample Postman collection is created to get started with the APIs operations if you are familiar with Postman software.	To download (https://stambia.org/internal-docman/591-analytics-rest-api-2-postman-collection/file?version=000000)	

xDI Analytics Source Management

Display all source packages that have been imported into analytics and where they are used:



- Administration
- Migration
- Source Management
- Error Log
- About



Navigator:

- My Session Reports
- Public Session Reports
- Delivery Projects
- Runtimes

ADM_PRF

Name	Status
PRD_LogDB	Connected
DEV_RunTM	Connected
PRD_RunTM	Connected
UAT_RunTM	Connected
DEV_LogDB	Connected
UAT_LogDB	Connected

Source Management Editor:

- Load All Datamart (6 octobre 2021 17:18:14 CEST)
- Load All Datamart (22 octobre 2021 17:44:41 CEST)
- Load All Datamart (28 octobre 2021 11:46:52 CEST)
- Load All Datamart (25 octobre 2020 18:14:33 CET)
- Load All Datamart (25 octobre 2020 18:21:35 CET)
- Load All Datamart (6 novembre 2021 08:23:44 CET)
- Load All Datamart (15 mai 2020 09:23:19 CEST)
- Load All Datamart (17 décembre 2020 12:08:02 CET)
- Load All Datamart (17 décembre 2020 12:14:21 CET)
- Load All Datamart (14 janvier 2021 11:47:48 CET)
- Load All Datamart (19 janvier 2021 08:41:26 CET)
- Load All Datamart (19 janvier 2021 09:02:20 CET)
- Load All Datamart (4 février 2021 11:39:10 CET)
- Load All Datamart (11 mars 2021 12:13:47 CET)

Information

Package Id : 2cc52e2f-d177-426b-83d4-ece14c789c85
Author : Jean-MichelSOUCHARD
Creation date :6 novembre 2021 08:23:44 CET
Update date : 31 octobre 2021 21:05:08 CET

Delivery Project / Package Manager

type filter text

- Datawarehouse
  - Load All Datamart
    - Version_1_0
    - Version_1_1

Sources

type filter text

- super
  - File
  - Rdbms MetaData
    - Hypersonic SQL
      - HSQL_Datamart
        - Password
        - Url
        - User
        - HOTEL_DATAMART
        - LOG
        - MAN_WOMAN
        - REJECT
        - REPLIC

Potential filter on the list of Packages

Display information about the source Packages

Display the related Delivery Project & Package manager

Content of sources

© 2020 Semarchy

- Web Service

Semarchy

xDI DEV

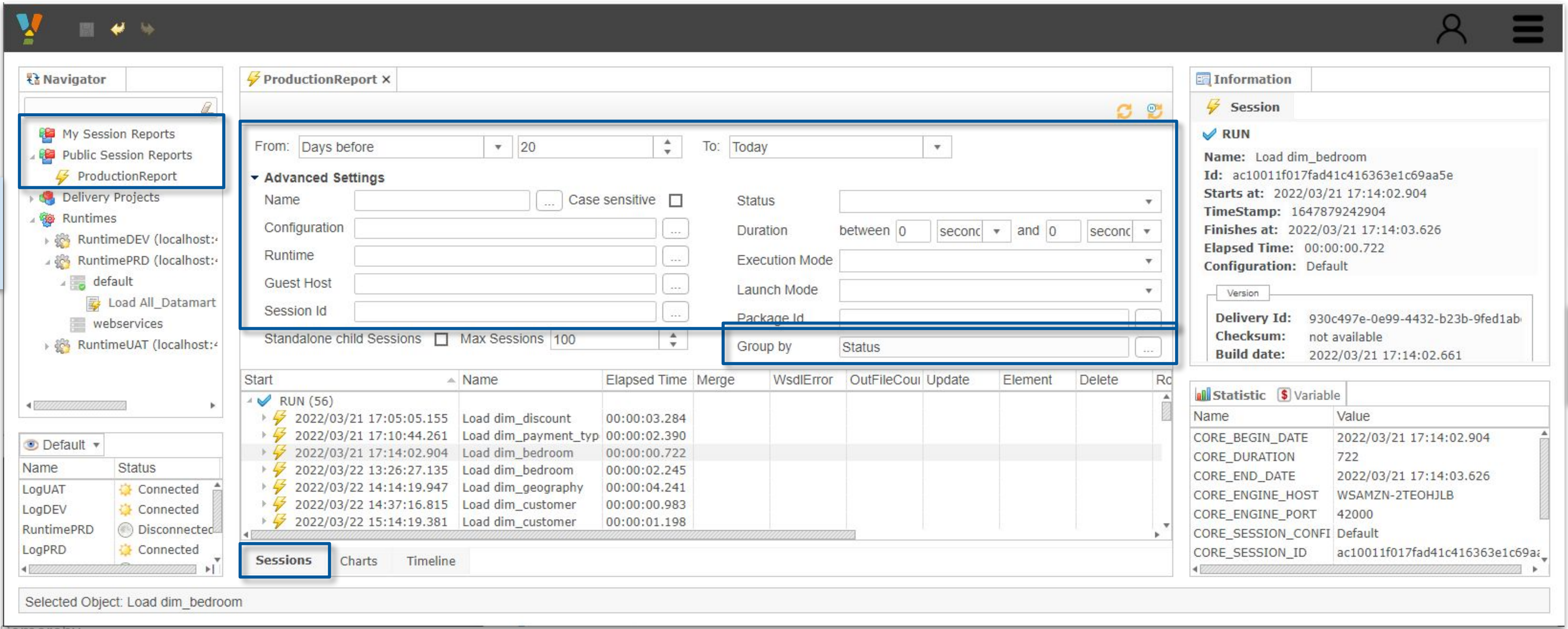
xDI Analytics

I3 - Session reporting

Following the sessions

Session executions can be followed in Analytics

- Filtered using criteria & grouped by different information
- Stored in “My Session Reports” (private) or in “Public Session Reports” (shared)



Name	Status
LogUAT	Connected
LogDEV	Connected
RuntimePRD	Disconnected
LogPRD	Connected

From: Days before 20 To: Today

Advanced Settings

Name: Case sensitive ☐

Configuration:

Runtime:

Guest Host:

Session Id:

Status:

Duration: between 0 second and 0 second

Execution Mode:

Launch Mode:

Package Id:

Standalone child Sessions ☐ Max Sessions 100

Group by: Status

Start	Name	Elapsed Time	Merge	WsdlError	OutFileCou	Update	Element	Delete	Ro
RUN (56)									
2022/03/21 17:05:05.155	Load dim_discount	00:00:03.284							
2022/03/21 17:10:44.261	Load dim_payment_typ	00:00:02.390							
2022/03/21 17:14:02.904	Load dim_bedroom	00:00:00.722							
2022/03/22 13:26:27.135	Load dim_bedroom	00:00:02.245							
2022/03/22 14:14:19.947	Load dim_geography	00:00:04.241							
2022/03/22 14:37:16.815	Load dim_customer	00:00:00.983							
2022/03/22 15:14:19.381	Load dim_customer	00:00:01.198							

RUN

Name: Load dim_bedroom
Id: ac10011f017fad41c416363e1c69aa5e
Starts at: 2022/03/21 17:14:02.904
TimeStamp: 1647879242904
Finishes at: 2022/03/21 17:14:03.626
Elapsed Time: 00:00:00.722
Configuration: Default

Version
Delivery Id: 930c497e-0e99-4432-b23b-9fed1ab
Checksum: not available
Build date: 2022/03/21 17:14:02.661

Statistic | Variable

Name	Value
CORE_BEGIN_DATE	2022/03/21 17:14:02.904
CORE_DURATION	722
CORE_END_DATE	2022/03/21 17:14:03.626
CORE_ENGINE_HOST	WSAMZN-2TEOHJLB
CORE_ENGINE_PORT	42000
CORE_SESSION_CONFI	Default
CORE_SESSION_ID	ac10011f017fad41c416363e1c69a

Selected Object: Load dim_bedroom

Location to store Session reports

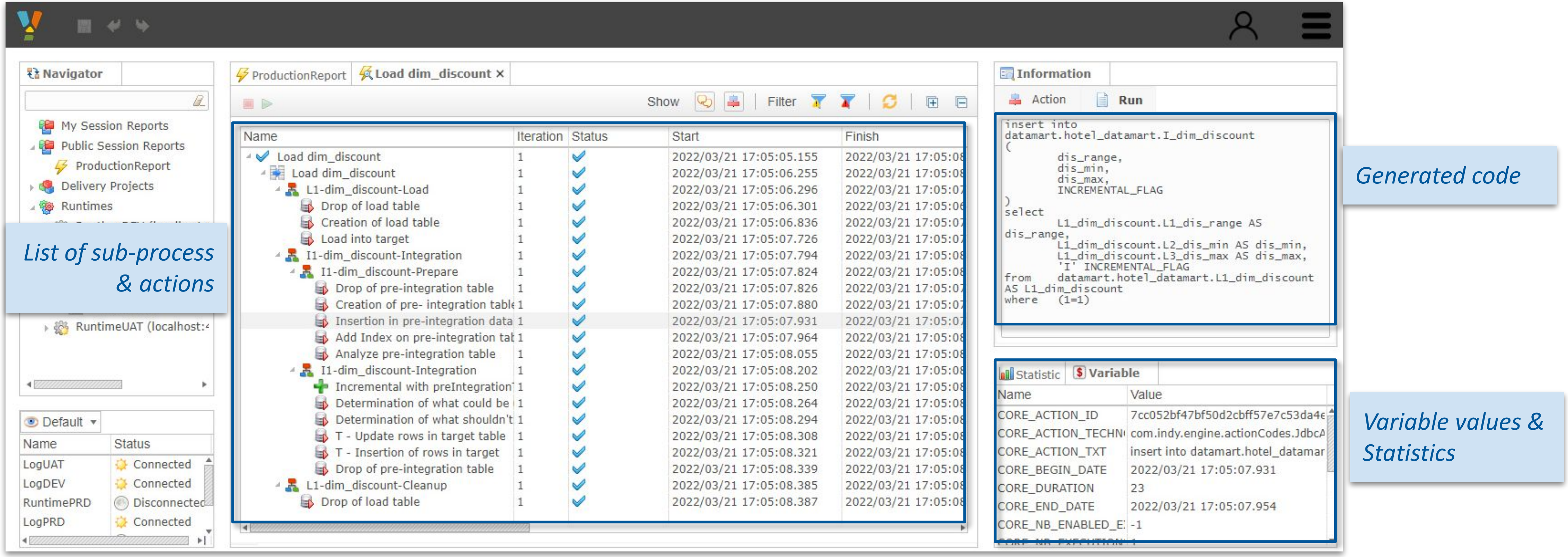
Criteria to filter

Group sessions per

Status
Name
Runtime
GuestHost
ExecutionMode
LaunchMode
Configuration

Following the sessions

Double-click on a session to have a look inside the session execution and see the different steps of the process:



Name	Status
LogUAT	Connected
LogDEV	Connected
RuntimePRD	Disconnectec
LogPRD	Connected

Name	Iteration	Status	Start	Finish
Load dim_discount	1	✓	2022/03/21 17:05:05.155	2022/03/21 17:05:08
Load dim_discount	1	✓	2022/03/21 17:05:06.255	2022/03/21 17:05:08
L1-dim_discount-Load	1	✓	2022/03/21 17:05:06.296	2022/03/21 17:05:07
Drop of load table	1	✓	2022/03/21 17:05:06.301	2022/03/21 17:05:06
Creation of load table	1	✓	2022/03/21 17:05:06.836	2022/03/21 17:05:07
Load into target	1	✓	2022/03/21 17:05:07.726	2022/03/21 17:05:07
I1-dim_discount-Integration	1	✓	2022/03/21 17:05:07.794	2022/03/21 17:05:08
I1-dim_discount-Prepare	1	✓	2022/03/21 17:05:07.824	2022/03/21 17:05:08
Drop of pre-integration table	1	✓	2022/03/21 17:05:07.826	2022/03/21 17:05:07
Creation of pre- integration table	1	✓	2022/03/21 17:05:07.880	2022/03/21 17:05:07
Insertion in pre-integration data	1	✓	2022/03/21 17:05:07.931	2022/03/21 17:05:07
Add Index on pre-integration tal	1	✓	2022/03/21 17:05:07.964	2022/03/21 17:05:08
Analyze pre-integration table	1	✓	2022/03/21 17:05:08.055	2022/03/21 17:05:08
I1-dim_discount-Integration	1	✓	2022/03/21 17:05:08.202	2022/03/21 17:05:08
Incremental with preIntegration	1	✓	2022/03/21 17:05:08.250	2022/03/21 17:05:08
Determination of what could be	1	✓	2022/03/21 17:05:08.264	2022/03/21 17:05:08
Determination of what shouldn't	1	✓	2022/03/21 17:05:08.294	2022/03/21 17:05:08
T - Update rows in target table	1	✓	2022/03/21 17:05:08.308	2022/03/21 17:05:08
T - Insertion of rows in target	1	✓	2022/03/21 17:05:08.321	2022/03/21 17:05:08
Drop of pre-integration table	1	✓	2022/03/21 17:05:08.339	2022/03/21 17:05:08
L1-dim_discount-Cleanup	1	✓	2022/03/21 17:05:08.385	2022/03/21 17:05:08
Drop of load table	1	✓	2022/03/21 17:05:08.387	2022/03/21 17:05:08

```
insert into
datamart.hotel_datamart.I_dim_discount
(
        dis_range,
        dis_min,
        dis_max,
        INCREMENTAL_FLAG
)
select
        L1_dim_discount.L1_dis_range AS
dis_range,
        L1_dim_discount.L2_dis_min AS dis_min,
        L1_dim_discount.L3_dis_max AS dis_max,
        'I' INCREMENTAL_FLAG
from    datamart.hotel_datamart.L1_dim_discount
AS L1_dim_discount
where   (1=1)
```

Name	Value
CORE_ACTION_ID	7cc052bf47bf50d2cbff57e7c53da4e
CORE_ACTION_TECHN	com.indy.engine.actionCodes.JdbcA
CORE_ACTION_TXT	insert into datamart.hotel_datamar
CORE_BEGIN_DATE	2022/03/21 17:05:07.931
CORE_DURATION	23
CORE_END_DATE	2022/03/21 17:05:07.954
CORE_NB_ENABLED_E	-1
CORE_NB_EXECUTION	1

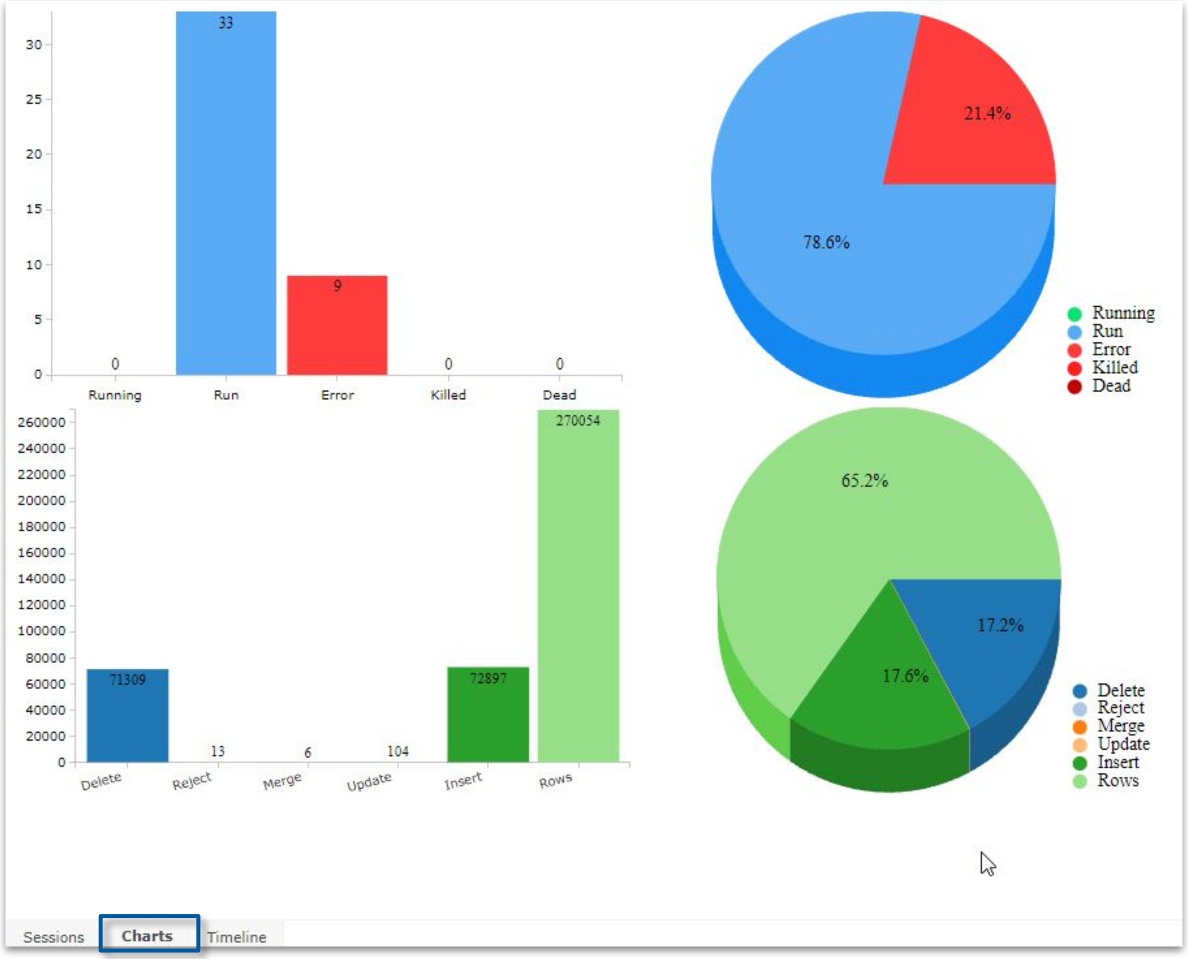
List of sub-process & actions

Generated code

Variable values & Statistics

Following the sessions

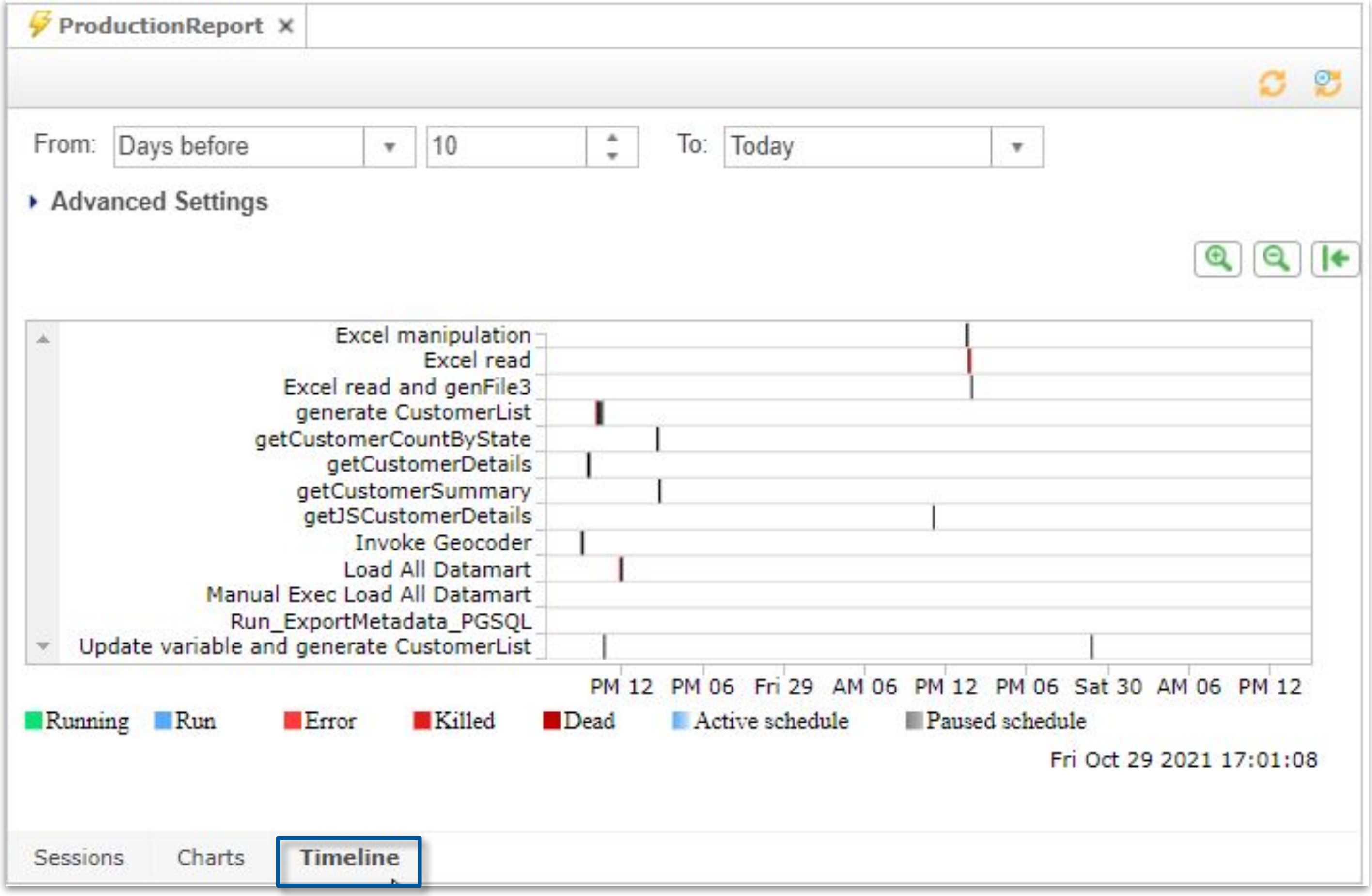
Follow the activity of the sessions through charts:



I-xDI Analytics

Following the sessions

Follow the activity of the sessions through TimeLines:



ProductionReport ×

From: Days before ▾ 10 To: Today ▾

▸ Advanced Settings

🟩 Running 🟦 Run 🟥 Error 🟥 Killed 🟥 Dead 🟦 Active schedule ▨ Paused schedule

Fri Oct 29 2021 17:01:08

I-xDI Analytics

- Web Service

Semarchy

xDI DEV

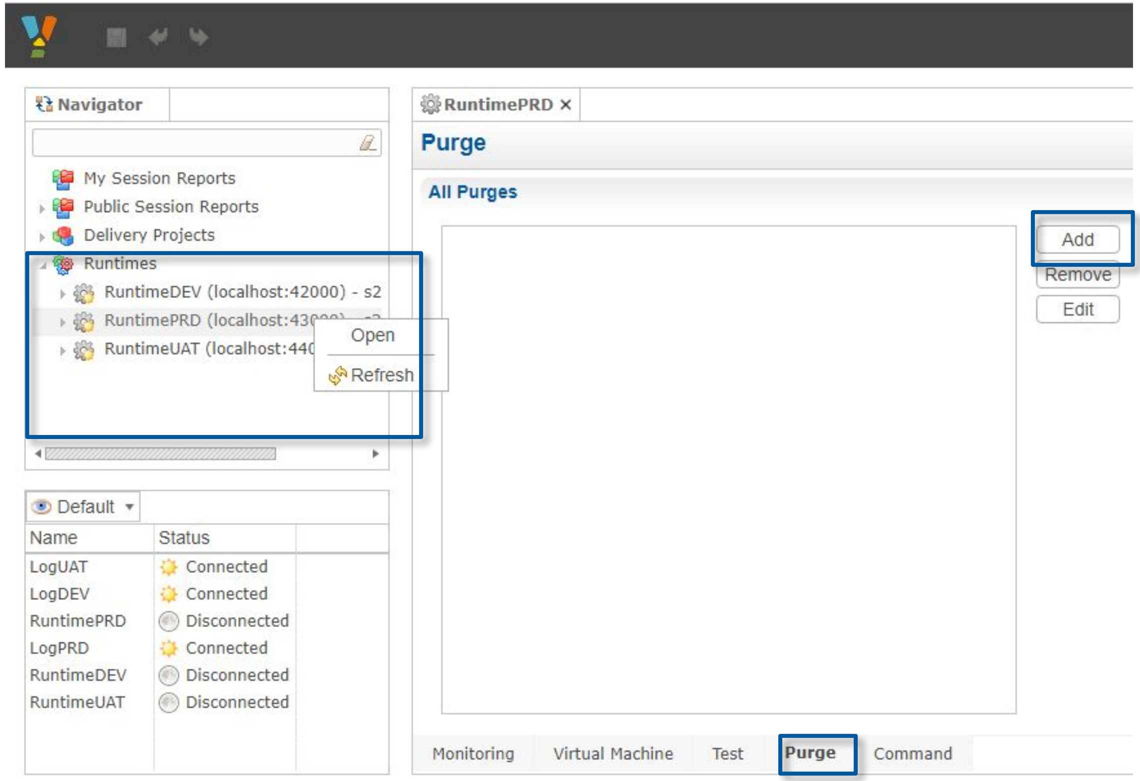
xDI Analytics

I4 - Further functions

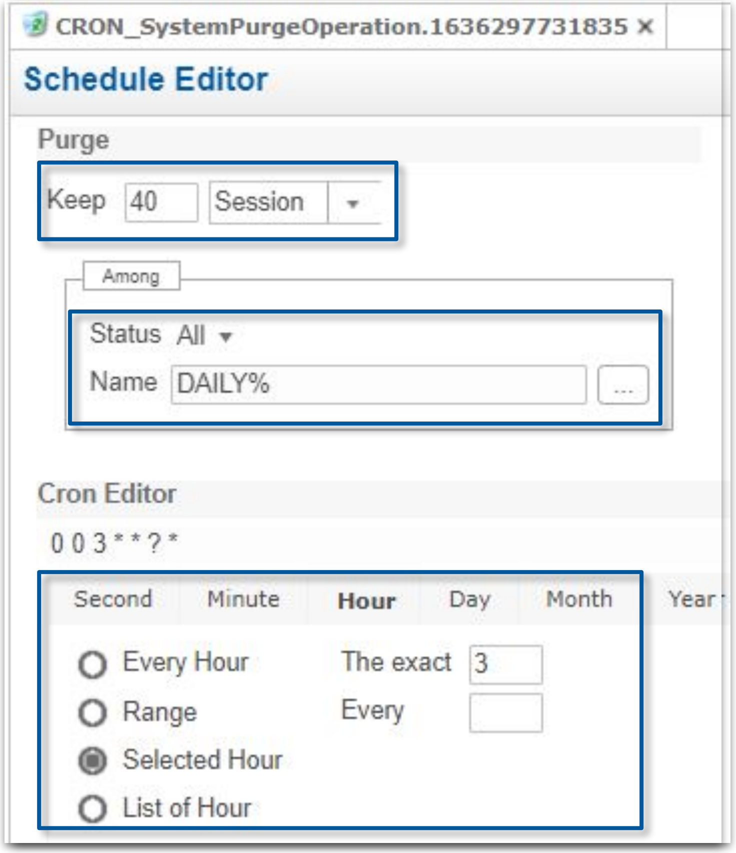
Purge the sessions

To plan purges:

- Open a Runtime
- Plan purges



Name	Status
LogUAT	Connected
LogDEV	Connected
RuntimePRD	Disconnected
LogPRD	Connected
RuntimeDEV	Disconnected
RuntimeUAT	Disconnected



Keep 40 Session

Status All

Name DAILY%

0 0 3 * * ? *

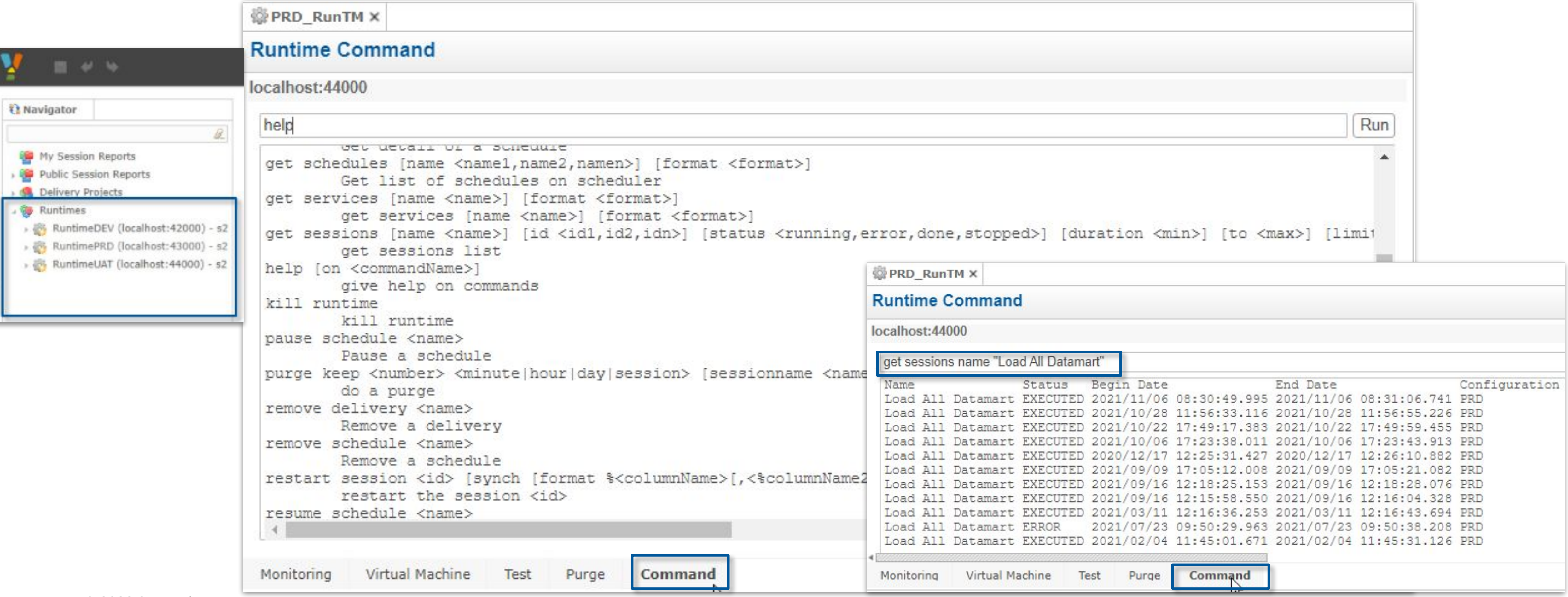
○ Every Hour
○ Range
● Selected Hour
○ List of Hour

The exact 3

Every

Execute Runtime commands

Possible to directly execute Runtime commands to retrieve Runtime information:



```
help
```

```
        Get detail of a schedule
get schedules [name <name1,name2,namen>] [format <format>]
        Get list of schedules on scheduler
get services [name <name>] [format <format>]
        get services [name <name>] [format <format>]
get sessions [name <name>] [id <id1,id2,idn>] [status <running,error,done,stopped>] [duration <min>] [to <max>] [limit
        get sessions list
help [on <commandName>]
        give help on commands
kill runtime
        kill runtime
pause schedule <name>
        Pause a schedule
purge keep <number> <minute|hour|day|session> [sessionname <name
        do a purge
remove delivery <name>
        Remove a delivery
remove schedule <name>
        Remove a schedule
restart session <id> [synch [format %<columnName>[,<%columnName2
        restart the session <id>
resume schedule <name>
```

```
get sessions name "Load All Datamart"
```

```
Name              Status   Begin Date              End Date                Configuration
Load All Datamart EXECUTED 2021/11/06 08:30:49.995 2021/11/06 08:31:06.741 PRD
Load All Datamart EXECUTED 2021/10/28 11:56:33.116 2021/10/28 11:56:55.226 PRD
Load All Datamart EXECUTED 2021/10/22 17:49:17.383 2021/10/22 17:49:59.455 PRD
Load All Datamart EXECUTED 2021/10/06 17:23:38.011 2021/10/06 17:23:43.913 PRD
Load All Datamart EXECUTED 2020/12/17 12:25:31.427 2020/12/17 12:26:10.882 PRD
Load All Datamart EXECUTED 2021/09/09 17:05:12.008 2021/09/09 17:05:21.082 PRD
Load All Datamart EXECUTED 2021/09/16 12:18:25.153 2021/09/16 12:18:28.076 PRD
Load All Datamart EXECUTED 2021/09/16 12:15:58.550 2021/09/16 12:16:04.328 PRD
Load All Datamart EXECUTED 2021/03/11 12:16:36.253 2021/03/11 12:16:43.694 PRD
Load All Datamart ERROR    2021/07/23 09:50:29.963 2021/07/23 09:50:38.208 PRD
Load All Datamart EXECUTED 2021/02/04 11:45:01.671 2021/02/04 11:45:31.126 PRD
```

To go further

Document Type	Link
Stambia.org article Getting started with Analytics HTTP REST API	https://stambia.org/doc/250-stambia-di-software/production-analytics/rest-api/714-getting-started-with-analytics-http-rest-api
Stambia.org article Analytics Docker	https://stambia.org/doc/54-stambia-di-software/production-analytics/installation-and-upgrade/690-analytics-docker
Stambia.org article Analytics 3.1	https://stambia.org/doc/125-stambia-di-software/production-analytics/release-notes/711-analytics-3-1-x

Semarchy

Questions?