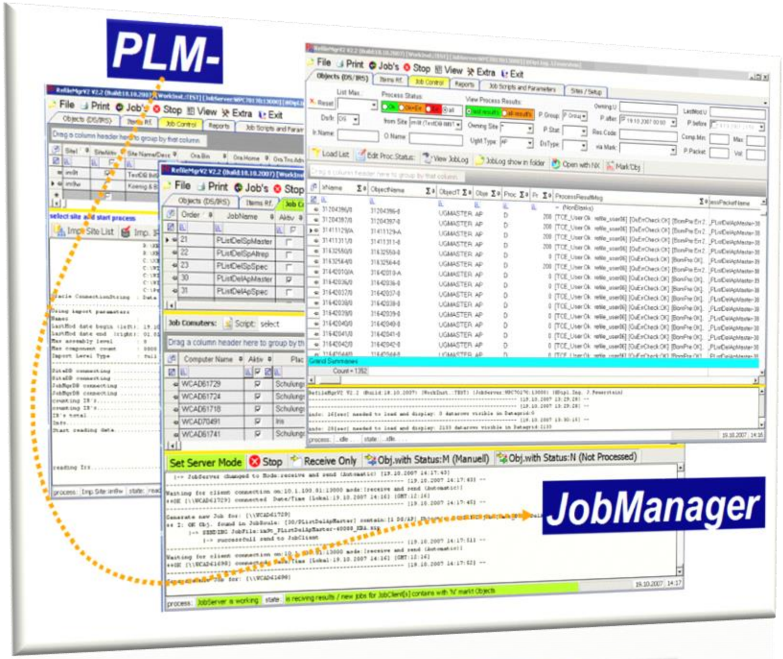

PLM-
JobManager
File Print Job's Stop View Extra Exit
Set Server Mode Stop Receive Only Obj.with Status:M (Manuell) Obj.with Status:N (Not Processed)

PLMJobManager – NXPartUpdate

Updating NX-Parts with Teamcenter environment

Author: Josef Feuerstein

Table of content

Introduction

What is PartUpdate ?

At any new version of NX, there are new functionality and modules. This causes changes of the data model.

When opening a Part-file, there is a check in which version it was saved.
When the saved version is older than the current one, NX is converting the data model inside the Part-file. – This is called PartUpdate

Why PartUpdate?

From our development… we are able to open Part-files from Version 12.
Therefore we do not need a PartUpdate?

When working with Teamcenter, we do not have write access to loaded or PartUpdated parts.
Why do we have no write access?

- Part i owned by a different group
- Part is released
- Part has a different owning site

Parts from a prior NX-version get a modification flag after loading If we PartUpdate the Parts during open it will increase the loading time. Without write access, we do a PartUpdate every time, when opening a part or assembly.
Part is from an „old“ project … does anybody know the NX-Version at that time? … does anybody know that there are „old“ projects?

To have a clean NX-Environment it is necessary to PartUpdate all Partfiles automatically and secure with the part_utility.exe tool.

Project Phase

Phase 1 – Analysis

- How many Datasets/Parts
- Analyse the environment (Precise/Imprecise, Loadoptions, Reference-Sets, Release status ...)
- Analyse and Setup the PartUpdate-Methods (order, settings and parameters)
- Check of disk space
- Clone the productive environment and Tests …

Phase 2 – Preparation and Test

- PlmJobManager-OS-User and TC-User setup
- Check assemblies
- Access via Remote Desktop Connection or VNC
- Installation PlmJobManager -Manager-Tool (Server + Clients)
- Import PlmJobManager-Database from TCEng.
- Define Datapackage and Order for the PlmJobManager
- Define available Timeframes (day, night, take care of backup times)
- Check-Out Objects … check them in, or mark them.
- Run PartUpdate-Tests
- Run CheckBox

Phase 3 – Performing

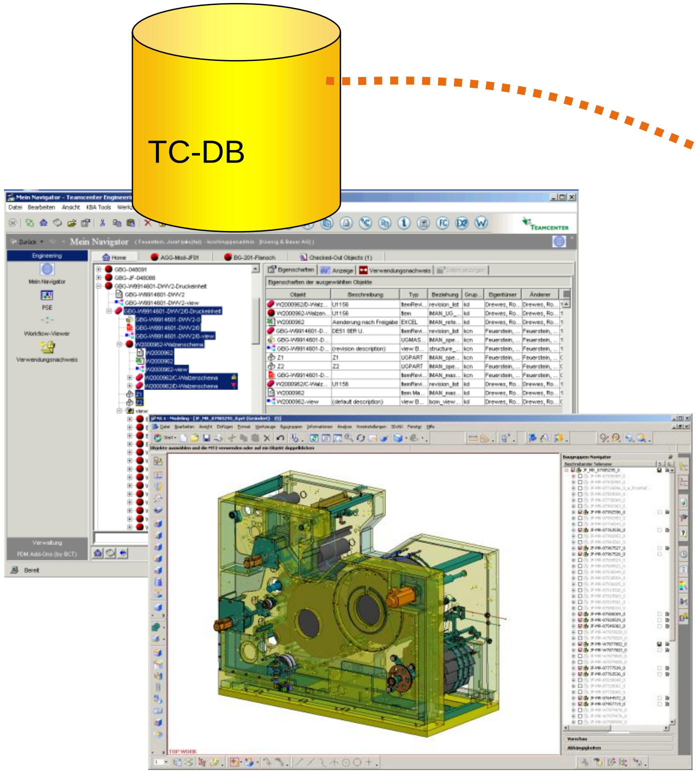
- Update the PlmJobManager-Database
- Explicit Check-Out Objects / User reference in a folder
- Check-Out Objects → prepare a Check In
- Run a Clearlocks
- Backup the Data
- PartUpdate-Packages at the PlmJobManager-Clients
- Analyse the PlmJobManager-Database
- Analyse the error PartUpdate-Parts
- Analyse the PartUpdate results … create reports from the PlmJobManager

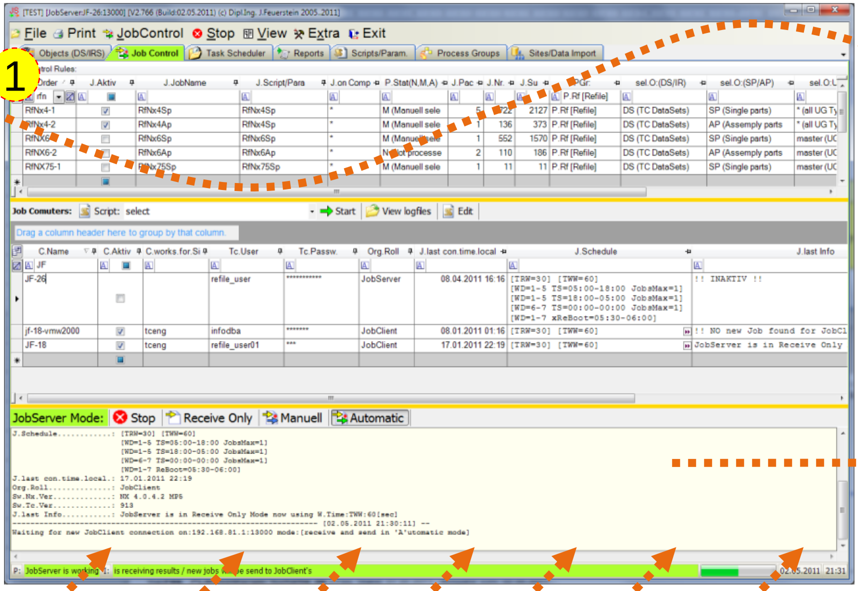
Chart Overview “Basic functionality” PLMJobManager

Teamcenter and NX environment

PLMJobManager environment

All the jobs are administered by the JobServer. Furthermore, the JobServer controls the associated database (DB) **(2)** and manages the results of the jobs. The related log files are stored on a file server **(3)**.



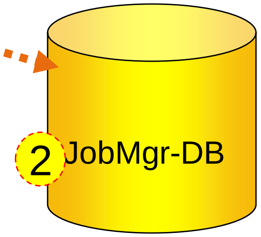


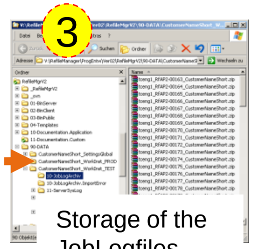
Order	J.Aktiv	J.JobName	J.Script/Para	J.on Comp	P.Stat(N,M,A)	J.Pac	J.Nr.	J.Su	P.Gr.	sel.O:(DS/IR)	sel.O:(SP/AP)	sel.O:L
rfn	■								P.Rf [Refile]			
RfNx4-1	☑	RfNx4Sp	RfNx4Sp	*	M (Manuell sele	5	722	2127	P.Rf [Refile]	DS (TC DataSets)	SP (Single parts)	* (all UG Ty
RfNx4-2	☑	RfNx4Ap	RfNx4Sp	*	M (Manuell sele	1	136	373	P.Rf [Refile]	DS (TC DataSets)	AP (Assemply parts	* (all UG Ty
RfNX6	□	RfNx6Sp	RfNx6Sp	*	M (Manuell sele	1	552	1570	P.Rf [Refile]	DS (TC DataSets)	SP (Single parts)	master (UC
RfNX6-2	□	RfNx6Ap	RfNx6Ap	*	N (Not processe	2	110	186	P.Rf [Refile]	DS (TC DataSets)	AP (Assemply parts	master (UC
RfNX75-1	□	RfNx75Sp	RfNx75Sp	*	M (Manuell sele	1	11	11	P.Rf [Refile]	DS (TC DataSets)	SP (Single parts)	master (UC

C.Name	C.Aktiv	C.works.for.Si	Tc.User	Tc.Passw.	Org.Roll	J.last con.time.local	J.Schedule	J.last Info
JF	■							
JF-26	□		refile_user	************	JobServer	08.04.2011 16:16	[TRW=30] [TWW=60] [WD=1-5 TS=05:00-18:00 JobsMax=1] [WD=1-5 TS=18:00-05:00 JobsMax=1] [WD=6-7 TS=00:00-00:00 JobsMax=1] [WD=1-7 xReBoot=05:30-06:00]	!! INAKTIV !!
jf-18-vmw2000	☑	tceng	infodba	*******	JobClient	08.01.2011 01:16	[TRW=30] [TWW=60]	!! NO new Job found for JobCl
JF-18	☑	tceng	refile_user01	***	JobClient	17.01.2011 22:19	[TRW=30] [TWW=60]	JobServer is in Receive Only

```
J.Schedule............: [TRW=30] [TWW=60]
                        [WD=1-5 TS=05:00-18:00 JobsMax=1]
                        [WD=1-5 TS=18:00-05:00 JobsMax=1]
                        [WD=6-7 TS=00:00-00:00 JobsMax=1]
                        [WD=1-7 ReBoot=05:30-06:00]
J.last con.time.local.: 17.01.2011 22:19
Org.Roll..............: JobClient
Sw.Nx.Ver.............: NX 4.0.4.2 MP5
Sw.Tc.Ver.............: 913
J.last Info...........: JobServer is in Receive Only Mode now using W.Time:TWW:60[sec]
------------------------------------------------------------------------------- [02.05.2011 21:30:11] --
Waiting for new JobClient connection on:192.168.81.1:13000 mode:[receive and send in 'A'utomatic mode]
```

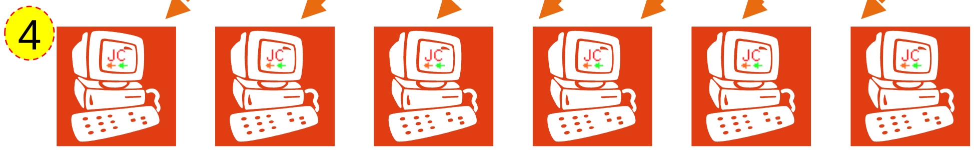
P: JobServer is working I: is receiving results / new jobs will be send to JobClient's 02.05.2011 21:31





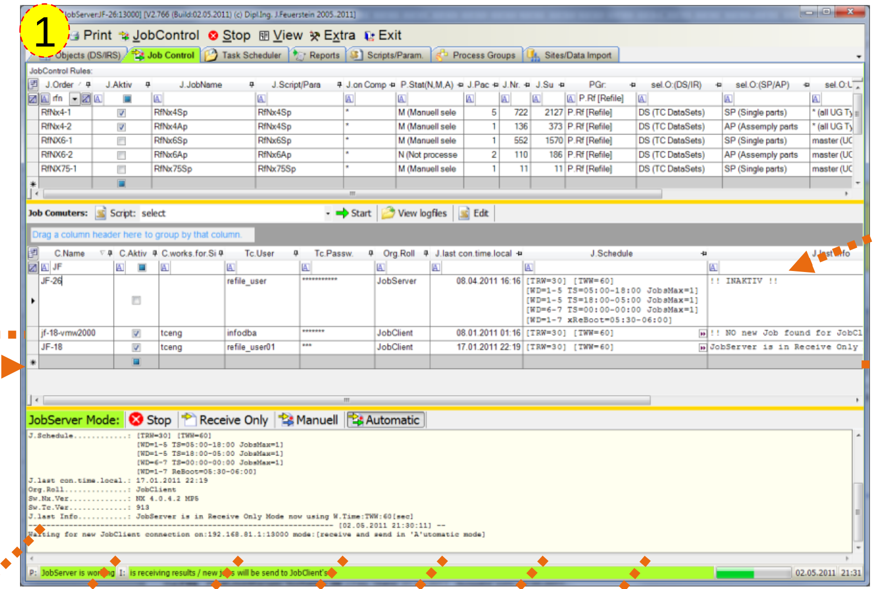
Storage of the JobLogfiles

JobServer (1) Controls JobClients (4)



Working with the JobServer: Job Control

The JobServer **(1)** will be located at one of your locations. It organizes the JobServer-DB **(2)** organizes all Job Clients **(3)** and storage of the PartUpdate results. **(4)**



JobServer:JF-26:13000] [V2.766 (Build:02.05.2011) (c) Dipl.Ing. J.Feuerstein 2005..2011]

JobControl Rules:

J.Order	J.Aktiv	J.JobName	J.Script/Para	J.on Comp	P.Stat(N,M,A)	J.Pac	J.Nr.	J.Su	PGr.	sel.O:(DS/IR)	sel.O:(SP/AP)	sel.O:L
rfn	■								P.Rf [Refile]			
RfNx4-1	☑	RfNx4Sp	RfNx4Sp	*	M (Manuell sele	5	722	2127	P.Rf [Refile]	DS (TC DataSets)	SP (Single parts)	* (all UG Ty
RfNx4-2	☑	RfNx4Ap	RfNx4Sp	*	M (Manuell sele	1	136	373	P.Rf [Refile]	DS (TC DataSets)	AP (Assemply parts	* (all UG Ty
RfNX6-1	□	RfNx6Sp	RfNx6Sp	*	M (Manuell sele	1	552	1570	P.Rf [Refile]	DS (TC DataSets)	SP (Single parts)	master (UC
RfNX6-2	□	RfNx6Ap	RfNx6Ap	*	N (Not processe	2	110	186	P.Rf [Refile]	DS (TC DataSets)	AP (Assemply parts	master (UC
RfNX75-1	□	RfNx75Sp	RfNx75Sp	*	M (Manuell sele	1	11	11	P.Rf [Refile]	DS (TC DataSets)	SP (Single parts)	master (UC

Job Comuters: Script: select

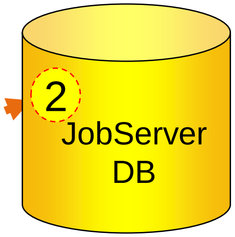
Drag a column header here to group by that column.

C.Name	C.Aktiv	C.works.for.Si	Tc.User	Tc.Passw.	Org.Roll	J.last con.time.local	J.Schedule	J.last Info
JF	■							
JF-26	□		refile_user	************	JobServer	08.04.2011 16:16	[TRW=30] [TWW=60] [WD=1-5 TS=05:00-18:00 JobsMax=1] [WD=1-5 TS=18:00-05:00 JobsMax=1] [WD=6-7 TS=00:00-00:00 JobsMax=1] [WD=1-7 xReBoot=05:30-06:00]	!! INAKTIV !!
jf-18-vmw2000	☑	tceng	infodba	*******	JobClient	08.01.2011 01:16	[TRW=30] [TWW=60]	!! NO new Job found for JobCl
JF-18	☑	tceng	refile_user01	***	JobClient	17.01.2011 22:19	[TRW=30] [TWW=60]	JobServer is in Receive Only

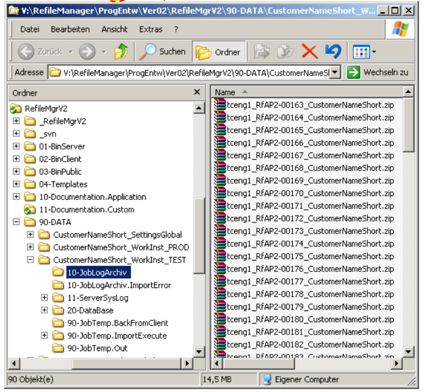
JobServer Mode:

```
J.Schedule............: [TRW=30] [TWW=60]
                        [WD=1-5 TS=05:00-18:00 JobsMax=1]
                        [WD=1-5 TS=18:00-05:00 JobsMax=1]
                        [WD=6-7 TS=00:00-00:00 JobsMax=1]
                        [WD=1-7 ReBoot=05:30-06:00]
J.last con.time.local.: 17.01.2011 22:19
Org.Roll..............: JobClient
Sw.Nx.Ver.............: NX 4.0.4.2 MP5
Sw.Tc.Ver.............: 913
J.last Info...........: JobServer is in Receive Only Mode now using W.Time:TWW:60[sec]
------------------------------------------------------------------- [02.05.2011 21:30:11] --
Waiting for new JobClient connection on:192.168.81.1:13000 mode:[receive and send in 'A'utomatic mode]
```

P: JobServer is working I: is receiving results / new jobs will be send to JobClient's 02.05.2011 21:31



The JobServer organizing the received JobLogfiles



V:\RefileManager\ProgEntw\Ver02\RefileMgrV2\90-DATA\CustomerNameShort_W...

Adresse V:\RefileManager\ProgEntw\Ver02\RefileMgrV2\90-DATA\CustomerNameSl

Ordner

- RefileMgrV2
  - _RefileMgrV2
  - _svn
  - 01-BinServer
  - 02-BinClient
  - 03-BinPublic
  - 04-Templates
  - 10-Documentation.Application
  - 11-Documentation.Custom
  - 90-DATA
    - CustomerNameShort_SettingsGlobal
    - CustomerNameShort_WorkInst_PROD
    - CustomerNameShort_WorkInst_TEST
      - 10-JobLogArchiv
      - 10-JobLogArchiv.ImportError
      - 11-ServerSysLog
      - 20-DataBase
      - 90-JobTemp.BackFromClient
      - 90-JobTemp.ImportExecute
      - 90-JobTemp.Out

Name

tceng1_RfAP2-00163_CustomerNameShort.zip
tceng1_RfAP2-00164_CustomerNameShort.zip
tceng1_RfAP2-00165_CustomerNameShort.zip
tceng1_RfAP2-00166_CustomerNameShort.zip
tceng1_RfAP2-00167_CustomerNameShort.zip
tceng1_RfAP2-00168_CustomerNameShort.zip
tceng1_RfAP2-00169_CustomerNameShort.zip
tceng1_RfAP2-00170_CustomerNameShort.zip
tceng1_RfAP2-00171_CustomerNameShort.zip
tceng1_RfAP2-00172_CustomerNameShort.zip
tceng1_RfAP2-00173_CustomerNameShort.zip
tceng1_RfAP2-00174_CustomerNameShort.zip
tceng1_RfAP2-00175_CustomerNameShort.zip
tceng1_RfAP2-00176_CustomerNameShort.zip
tceng1_RfAP2-00177_CustomerNameShort.zip
tceng1_RfAP2-00178_CustomerNameShort.zip
tceng1_RfAP2-00179_CustomerNameShort.zip
tceng1_RfAP2-00180_CustomerNameShort.zip
tceng1_RfAP2-00181_CustomerNameShort.zip
tceng1_RfAP2-00182_CustomerNameShort.zip
tceng1_RfAP2-00183_CustomerNameShort.zip

90 Objekt(e) 14,5 MB Eigener Computer

Procedure of the processing:
The JobClients **(5)** are connecting to the JobServer **(1)** and receiving a PartUpdate Job (packet) **(6)**. The JobClient hands over the Results to the JobServer **(7)**.

3 Coordination of the JobClient‘s

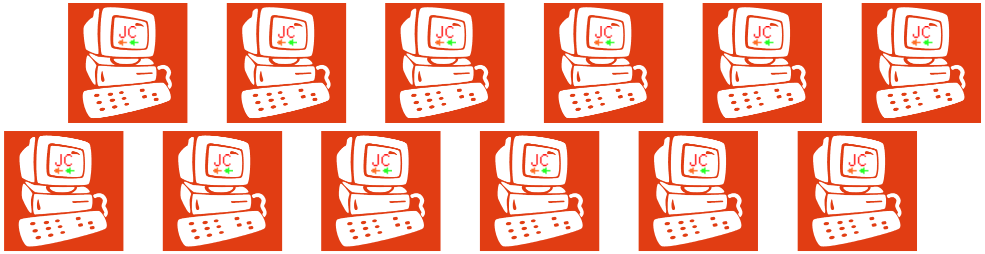
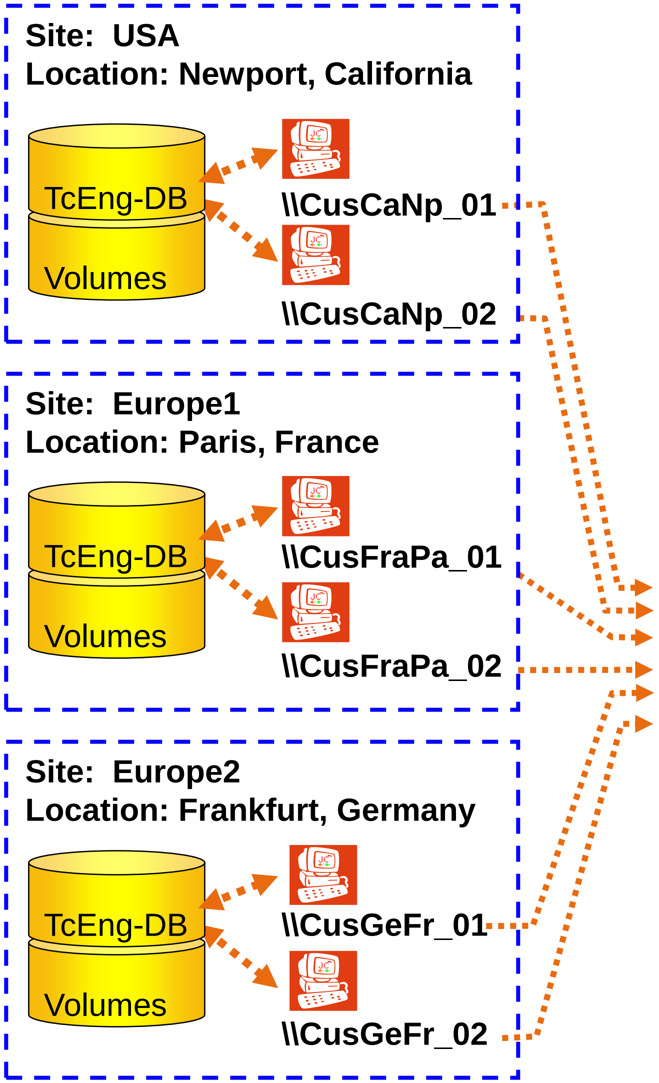


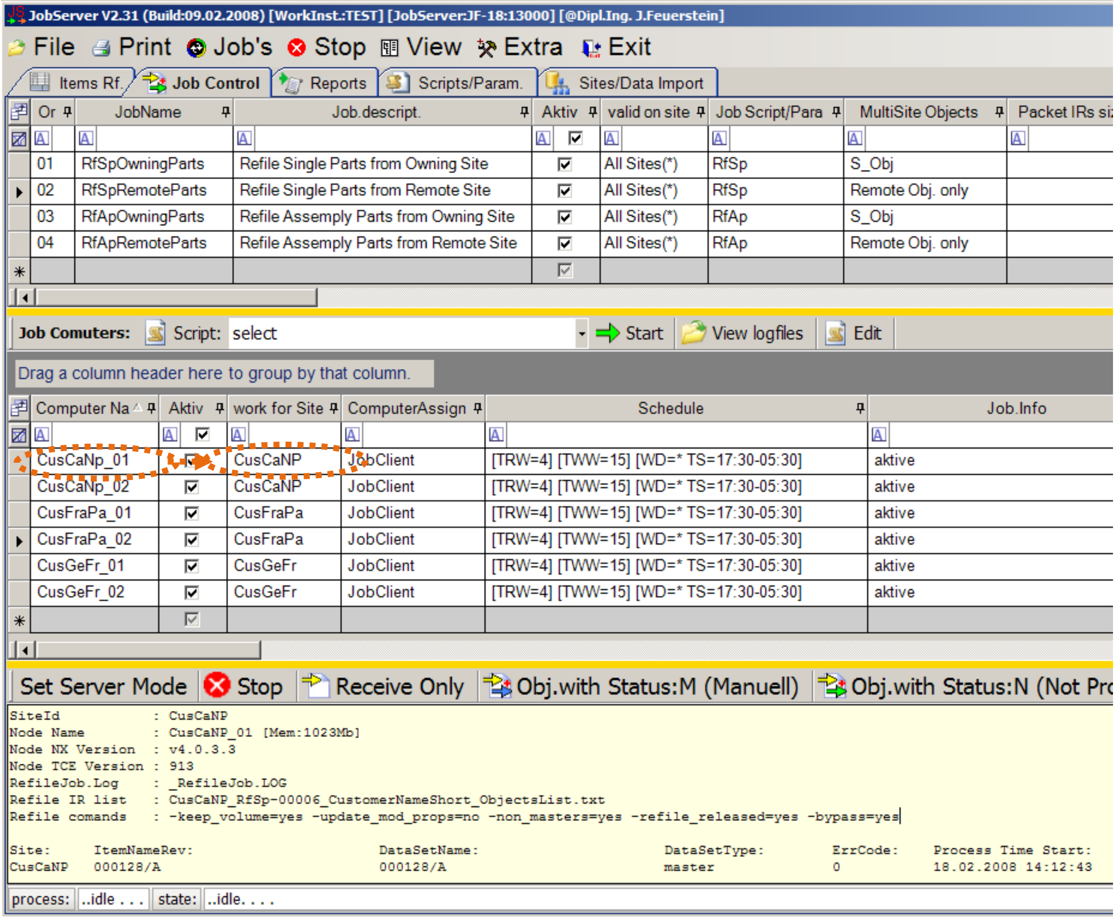
Chart Overview “Multisite environment”

Sites



JobServer and NXPartUpdate environment

The JobServer will be located at one of your locations. From all sites the IR Lists for NX-PartUpdate will be imported to the JobServer Database


JobServer V2.31 (Build:09.02.2008) [WorkInst.:TEST] [JobServer:JF-18:13000] [@Dipl.Ing. J.Feuerstein]
File
Print
Job's
Stop
View
Extra
Exit
Items Rf.
Job Control
Reports
Scripts/Param.
Sites/Data Import

Or	JobName	Job.descript.	Aktiv	valid on site	Job Script/Para	MultiSite Objects	Packet IRs si
01	RfSpOwningParts	Refile Single Parts from Owning Site	☑	All Sites(*)	RfSp	S_Obj	
02	RfSpRemoteParts	Refile Single Parts from Remote Site	☑	All Sites(*)	RfSp	Remote Obj. only	
03	RfApOwningParts	Refile Assemply Parts from Owning Site	☑	All Sites(*)	RfAp	S_Obj	
04	RfApRemoteParts	Refile Assemply Parts from Remote Site	☑	All Sites(*)	RfAp	Remote Obj. only	

Script: select

Drag a column header here to group by that column.

Computer Na	Aktiv	work for Site	ComputerAssign	Schedule	Job.Info
CusCaNp_01	☑	CusCaNP	JobClient	[TRW=4] [TWW=15] [WD=* TS=17:30-05:30]	aktive
CusCaNp_02	☑	CusCaNP	JobClient	[TRW=4] [TWW=15] [WD=* TS=17:30-05:30]	aktive
CusFraPa_01	☑	CusFraPa	JobClient	[TRW=4] [TWW=15] [WD=* TS=17:30-05:30]	aktive
CusFraPa_02	☑	CusFraPa	JobClient	[TRW=4] [TWW=15] [WD=* TS=17:30-05:30]	aktive
CusGeFr_01	☑	CusGeFr	JobClient	[TRW=4] [TWW=15] [WD=* TS=17:30-05:30]	aktive
CusGeFr_02	☑	CusGeFr	JobClient	[TRW=4] [TWW=15] [WD=* TS=17:30-05:30]	aktive

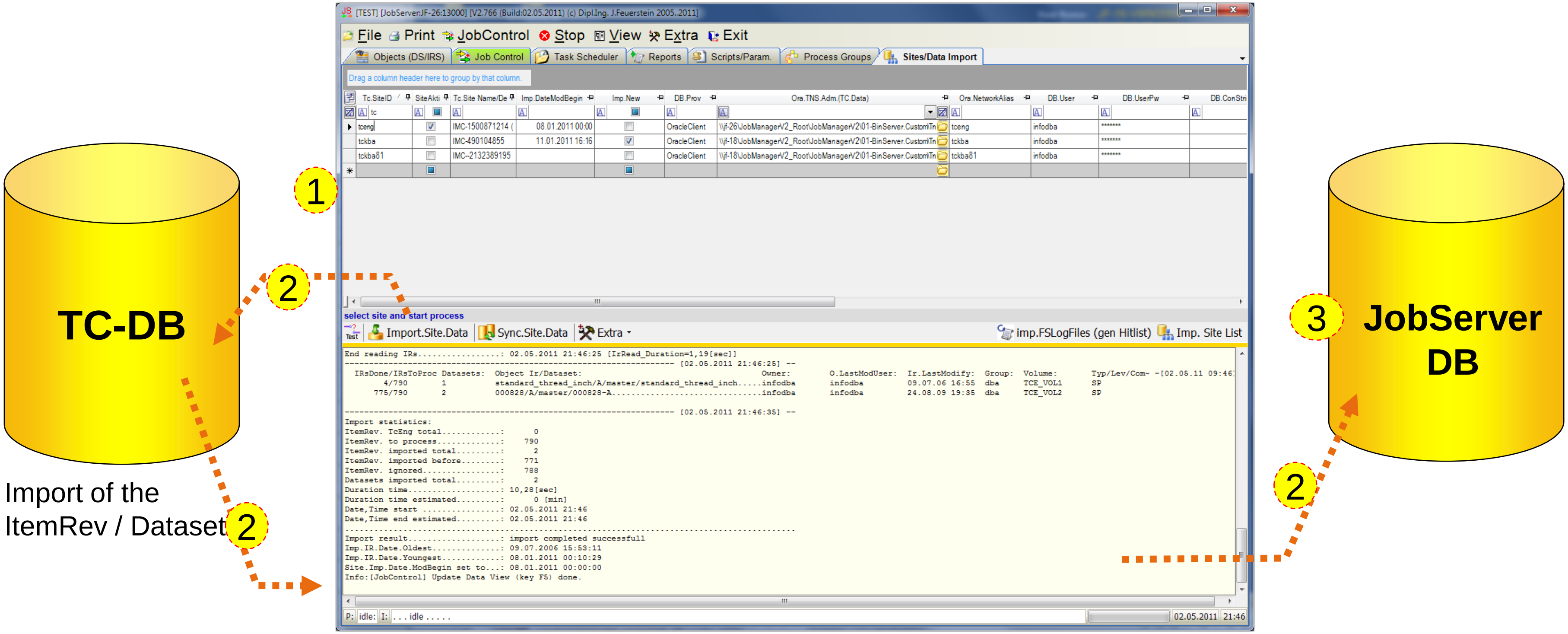
```
SiteId            : CusCaNP
Node Name         : CusCaNP_01 [Mem:1023Mb]
Node NX Version   : v4.0.3.3
Node TCE Version  : 913
RefileJob.Log     : _RefileJob.LOG
Refile IR list    : CusCaNP_RfSp-00006_CustomerNameShort_ObjectsList.txt
Refile comands    : -keep_volume=yes -update_mod_props=no -non_masters=yes -refile_released=yes -bypass=yes

Site:     ItemNameRev:                     DataSetName:                     DataSetType:       ErrCode:    Process Time Start:
CusCaNP   000128/A                         000128/A                         master             0           18.02.2008 14:12:43
```

process: ..idle . . . state: ..idle. . . .

JobManager Database

Load the data into the PLMJobManager

- In the JobServer we setup all customer Sites **(1)**
- Import all ItemRev and Datasets into the JobServer-DB **(2)**.
- This is the content of the JobServer-DB **(3)** and they are the database for the Job Process



Tc.SiteID	SiteAkti	Tc.Site Name/De	Imp.DateModBegin	Imp.New	DB.Prov	Ora.TNS.Adm.(TC.Data)	Ora.NetworkAlias	DB.User	DB.UserPw	DB.ConStri
tc										
tceng	☑	IMC-1500871214 (	08.01.2011 00:00	□	OracleClient	\\jf-26\JobManagerV2_Root\JobManagerV2\01-BinServer.Custom\Tn	tceng	infodba	*******	
tckba	□	IMC-490104855	11.01.2011 16:16	☑	OracleClient	\\jf-18\JobManagerV2_Root\JobManagerV2\01-BinServer.Custom\Tn	tckba	infodba	*******	
tckba81	□	IMC--2132389195		□	OracleClient	\\jf-18\JobManagerV2_Root\JobManagerV2\01-BinServer.Custom\Tn	tckba81	infodba	*******	

```
End reading IRs.................: 02.05.2011 21:46:25 [IrRead_Duration=1,19[sec]]
--------------------------------------------------------------------- [02.05.2011 21:46:25] --
  IRsDone/IRsToProc Datasets:  Object Ir/Dataset:                                   Owner:        O.LastModUser:  Ir.LastModify:  Group:  Volume:       Typ/Lev/Com~ -[02.05.11 09:46
       4/790        1          standard_thread_inch/A/master/standard_thread_inch.....infodba       infodba         09.07.06 16:55  dba     TCE_VOL1      SP
     775/790        2          000828/A/master/000828-A..............................infodba       infodba         24.08.09 19:35  dba     TCE_VOL2      SP

--------------------------------------------------------------------- [02.05.2011 21:46:35] --
Import statistics:
ItemRev. TcEng total............:      0
ItemRev. to process.............:    790
ItemRev. imported total.........:      2
ItemRev. imported before........:    771
ItemRev. ignored................:    788
Datasets imported total.........:      2
Duration time...................: 10,28[sec]
Duration time estimated.........:      0 [min]
Date,Time start ................: 02.05.2011 21:46
Date,Time end estimated.........: 02.05.2011 21:46
.......................................................................................
Import result...................: import completed successfull
Imp.IR.Date.Oldest..............: 09.07.2006 15:53:11
Imp.IR.Date.Youngest............: 08.01.2011 00:10:29
Site.Imp.Date.ModBegin set to...: 08.01.2011 00:00:00
Info:[JobControl] Update Data View (key F5) done.
```

P: idle: I: . . . idle 02.05.2011 21:46

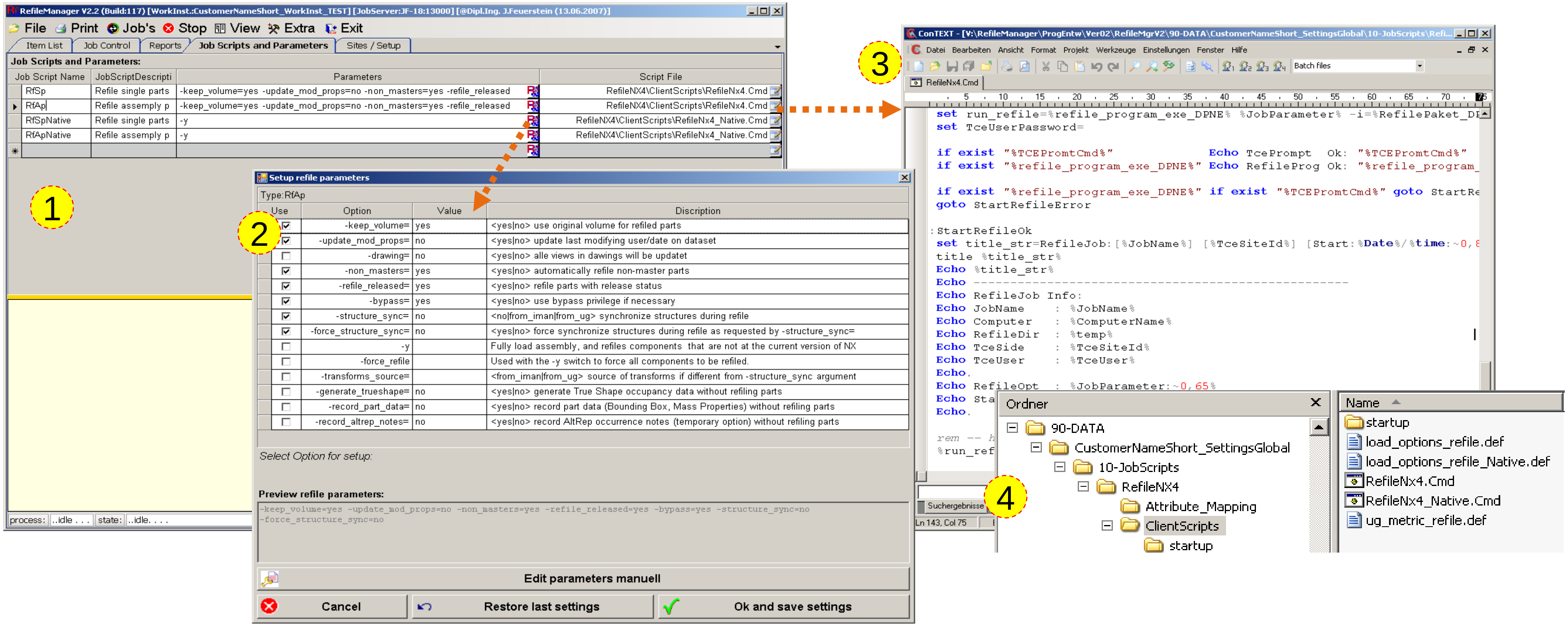
Import of the ItemRev / Dataset 2

Setup and control of the PartUpdate options and scripts

The setup and control of the NX-PartUpdate Parameter **(2)** is done inside the JobServer **(1)**. Also the needed scripts **(3)** an the NX-PartUpdate setup **(4)** will be organized there.

Benefit:

- ✓ Easy administration of all NX-PartUpdate parameters. **(2)**
- ✓ Clear organization of the scripts **(3)** and setups **(4)**



Job Scripts and Parameters:

Job Script Name	JobScriptDescripti	Parameters	Script File
RfSp	Refile single parts	-keep_volume=yes -update_mod_props=no -non_masters=yes -refile_released	RefileNX4\ClientScripts\RefileNx4.Cmd
RfAp	Refile assemply p	-keep_volume=yes -update_mod_props=no -non_masters=yes -refile_released	RefileNX4\ClientScripts\RefileNx4.Cmd
RfSpNative	Refile single parts	-y	RefileNX4\ClientScripts\RefileNx4_Native.Cmd
RfApNative	Refile assemply p	-y	RefileNX4\ClientScripts\RefileNx4_Native.Cmd
*			

process: ..idle . . . state: ..idle. . . .

Type:RfAp

Use	Option	Value	Discription
☑	-keep_volume=	yes	<yes|no> use original volume for refiled parts
☑	-update_mod_props=	no	<yes|no> update last modifying user/date on dataset
☐	-drawing=	no	<yes|no> alle views in dawings will be updatet
☑	-non_masters=	yes	<yes|no> automatically refile non-master parts
☑	-refile_released=	yes	<yes|no> refile parts with release status
☑	-bypass=	yes	<yes|no> use bypass privilege if necessary
☑	-structure_sync=	no	<no|from_iman|from_ug> synchronize structures during refile
☑	-force_structure_sync=	no	<yes|no> force synchronize structures during refile as requested by -structure_sync=
☐	-y		Fully load assembly, and refiles components that are not at the current version of NX
☐	-force_refile		Used with the -y switch to force all components to be refiled.
☐	-transforms_source=		<from_iman|from_ug> source of transforms if different from -structure_sync argument
☐	-generate_trueshape=	no	<yes|no> generate True Shape occupancy data without refiling parts
☐	-record_part_data=	no	<yes|no> record part data (Bounding Box, Mass Properties) without refiling parts
☐	-record_altrep_notes=	no	<yes|no> record AltRep occurrence notes (temporary option) without refiling parts

Select Option for setup:

Preview refile parameters:

```
-keep_volume=yes -update_mod_props=no -non_masters=yes -refile_released=yes -bypass=yes -structure_sync=no
-force_structure_sync=no
```

```
set run_refile=%refile_program_exe_DPNE% %JobParameter% -i=%RefilePaket_DE
set TceUserPassword=

if exist "%TCEPromtCmd%"                Echo TcePrompt  Ok:  "%TCEPromtCmd%"
if exist "%refile_program_exe_DPNE%" Echo RefileProg Ok:  "%refile_program_

if exist "%refile_program_exe_DPNE%" if exist "%TCEPromtCmd%" goto StartRe
goto StartRefileError

:StartRefileOk
set title_str=RefileJob:[%JobName%] [%TceSiteId%] [Start:%Date%/%time:~0,8
title %title_str%
Echo %title_str%
Echo ------------------------------------------------
Echo RefileJob Info:
Echo JobName     : %JobName%
Echo Computer    : %ComputerName%
Echo RefileDir   : %temp%
Echo TceSide     : %TceSiteId%
Echo TceUser     : %TceUser%
Echo.
Echo RefileOpt   : %JobParameter:~0,65%
Echo Sta
Echo.

rem -- h
%run_ref
```

Ordner

- 90-DATA
  - CustomerNameShort_SettingsGlobal
    - 10-JobScripts
      - RefileNX4
        - Attribute_Mapping
        - ClientScripts
          - startup

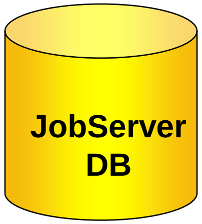
Name

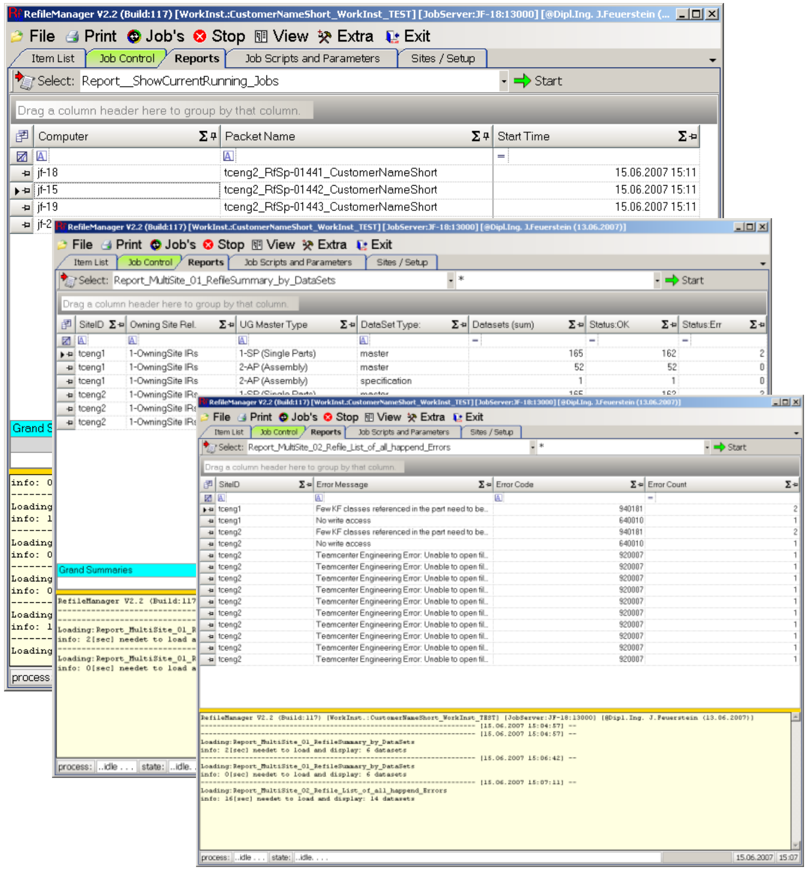
- startup
- load_options_refile.def
- load_options_refile_Native.def
- RefileNx4.Cmd
- RefileNx4_Native.Cmd
- ug_metric_refile.def

Working with the JobServer: Reports

Reporting functionality:
- Monitoring of the JobClient processes
- Analysis of the PartUpdate-Logfiles

The **Excel Export** functionality allows you to easily store all needed data for further own calculations.




RefileManager V2.2 (Build:117) [WorkInst.:CustomerNameShort_WorkInst_TEST] [JobServer:JF-18:13000] [@Dipl.Ing. J.Feuerstein (...
File
Print
Job's
Stop
View
Extra
Exit
Item List
Job Control
Reports
Job Scripts and Parameters
Sites / Setup
Start
Drag a column header here to group by that column.

Select: Report__ShowCurrentRunning_Jobs

Computer	Packet Name	Start Time
jf-18	tceng2_RfSp-01441_CustomerNameShort	15.06.2007 15:11
jf-15	tceng2_RfSp-01442_CustomerNameShort	15.06.2007 15:11
jf-19	tceng2_RfSp-01443_CustomerNameShort	15.06.2007 15:11
jf-2		

RefileManager V2.2 (Build:117) [WorkInst.:CustomerNameShort_WorkInst_TEST] [JobServer:JF-18:13000] [@Dipl.Ing. J.Feuerstein (13.06.2007)]

Select: Report_MultiSite_01_RefleSummary_by_DataSets *

SiteID	Owning Site Rel.	UG Master Type	DataSet Type:	Datasets (sum)	Status:OK	Status:Err
tceng1	1-OwningSite IRs	1-SP (Single Parts)	master	165	162	2
tceng1	1-OwningSite IRs	2-AP (Assembly)	master	52	52	0
tceng1	1-OwningSite IRs	2-AP (Assembly)	specification	1	1	0
tceng2	1-OwningSite IRs	1-SP (Single Parts)	master	165	162	2
tceng2	1-OwningSite IRs					
tceng2	1-OwningSite IRs					

Grand Summaries

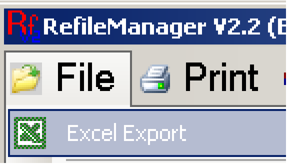
RefileManager V2.2 (Build:117) [WorkInst.:CustomerNameShort_WorkInst_TEST] [JobServer:JF-18:13000] [@Dipl.Ing. J.Feuerstein (13.06.2007)]

Select: Report_MultiSite_02_Refile_List_of_all_happend_Errors *

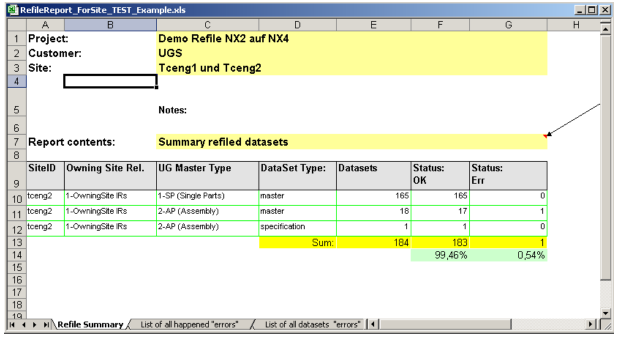
SiteID	Error Message	Error Code	Error Count
tceng1	Few KF classes referenced in the part need to be...	940181	2
tceng1	No write access	640010	1
tceng2	Few KF classes referenced in the part need to be...	940181	2
tceng2	No write access	640010	1
tceng2	Teamcenter Engineering Error: Unable to open fil...	920007	1
tceng2	Teamcenter Engineering Error: Unable to open fil...	920007	1
tceng2	Teamcenter Engineering Error: Unable to open fil...	920007	1
tceng2	Teamcenter Engineering Error: Unable to open fil...	920007	1
tceng2	Teamcenter Engineering Error: Unable to open fil...	920007	1
tceng2	Teamcenter Engineering Error: Unable to open fil...	920007	1
tceng2	Teamcenter Engineering Error: Unable to open fil...	920007	1
tceng2	Teamcenter Engineering Error: Unable to open fil...	920007	1
tceng2	Teamcenter Engineering Error: Unable to open fil...	920007	1
tceng2	Teamcenter Engineering Error: Unable to open fil...	920007	1

```
RefileManager V2.2 (Build:117) [WorkInst.:CustomerNameShort_WorkInst_TEST] [JobServer:JF-18:13000] [@Dipl.Ing. J.Feuerstein (13.06.2007)]
-------------------------------------------------------------------- [15.06.2007 15:04:57] --
-------------------------------------------------------------------- [15.06.2007 15:04:57] --
Loading:Report_MultiSite_01_RefileSummary_by_DataSets
info: 2[sec] needet to load and display: 6 datasets
-------------------------------------------------------------------- [15.06.2007 15:06:42] --
Loading:Report_MultiSite_01_RefileSummary_by_DataSets
info: 0[sec] needet to load and display: 6 datasets
-------------------------------------------------------------------- [15.06.2007 15:07:11] --
Loading:Report_MultiSite_02_Refile_List_of_all_happend_Errors
info: 16[sec] needet to load and display: 14 datasets
```

process: ..idle . . . state: ..idle. . . . 15.06.2007 15:07

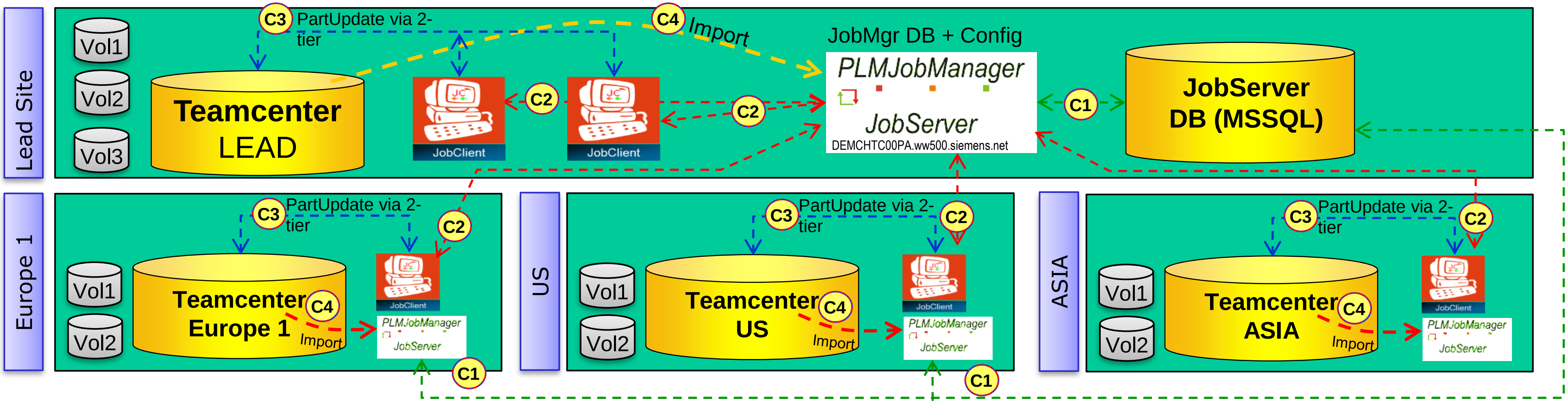


Use the clipboard (copy/paste) functionality if some data is needed in your own documents.


RefileReport_ForSite_TEST_Example.xls
Refile Summary
List of all happened "errors"
List of all datasets "errors"

	A	B	C	D	E	F	G
1	Project:		Demo Refile NX2 auf NX4				
2	Customer:		UGS				
3	Site:		Tceng1 und Tceng2				
4							
5			Notes:				
6							
7	Report contents:		Summary refiled datasets				
8							
9	SiteID	Owning Site Rel.	UG Master Type	DataSet Type:	Datasets	Status: OK	Status: Err
10	tceng2	1-OwningSite IRs	1-SP (Single Parts)	master	165	165	0
11	tceng2	1-OwningSite IRs	2-AP (Assembly)	master	18	17	1
12	tceng2	1-OwningSite IRs	2-AP (Assembly)	specification	1	1	0
13				Sum:	184	183	1
14						99,46%	0,54%

System Sketch TC + JobManager



Nr	Description	Connect via:
C1	communication JobServer MS-SQL	TCP:1433 UDP: 1434
C2	communication JobClinet – JobServer	Port:13000 / 13001
C3	part_utility.exe (2-tier)	Handel by IT
C4	Import Meta Data from TC Db	Uses TnsNames.ora like **(C3)**

System prerequisite

1. Teamcenter inc. all Volumes Data
2. The Volumes need to have +1/3 free diskspace
   Example.: fpr 100 GB NX Data we need 33 GB of free disc space
3. Oracle Read Only User reading data from TC. Database.
4. TC PartUpdate User with DBA right
5. TC PartUpdate User mast have read write right's on all Volumes
6. Script to get TC Prompt.
7. JobClients with TC 2Tier client and NX in the correct version
8. Remote Access to NX PartUpdate JobClient's
9. 600 MB of Network disk space for PLMJobmanager Software Installation and configuration
10. ~1 GB Network diskspace for JobProcess Logfiles for each 250.000 Parts to PartUpdate

How to PartUpdate?

For a optimum PartUpdate Result we defined the following Steps for convert mating conditions:

Step 1: Pu. Last Used Singelpart‘s
Step 2: Pu. Last Used Assembly Part`s → Base PartUpdate
Step 3: Pu. Last Used Assembly Part`s → -convert_mcs

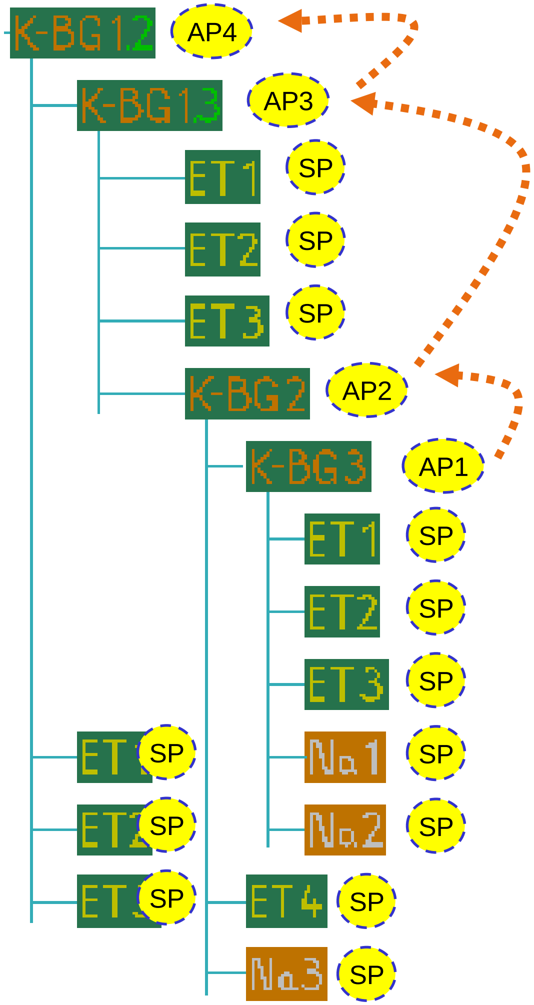
Step 4: Pu. Remaining Singelpart‘s
Step 5: Pu. Remaining Assembly Part`s → Base PartUpdate
Step 6: Pu. Remaining Assembly Part`s → -convert_mcs

Step 7: Generate Result Report

During PartUpdate Process and specially between the PartUpdate Steps it is recommended to Analyze the PartUpdate Results.

How to Update you NX-Parts?

Botton - Up Prinzip:



The Part-Update of the Nx Data should be done via Bottom-Up Principe.

The advance is that the Update of Assembly is systematic processed from Bottom Up. It reduces the update time and improves the final Data quality

Therefore the Parts and Processed in this order:

- **First all = Single Part‘s (SP)**
- **All Assembly's (AP) started with the lowest mound of levels and components.**

AP1	**has 1 Level**	**5 Component**
AP2	**has 2 Level’s**	**8 Component**
AP3	**has 3 Level’s**	**12 Component**
AP4	**has 4 Level’s**	**16 Component**

NX-PartUpdate with the *PLMJobManager*

It supports and optimizes the upgrade to a higher NX-Version within a unique procedural method.

The following methods are supported from the PLMJobManager:

✓ processing sequence of the NX Partfiles:

- Single Parts → recent parts at first, older parts at last
- Assemblies → with the „Button Up“ principle
  (Button Up = dependent of the amount of components, from button to top)

✓ Adjustments for processing sequence i.e. volumes, groups, projects etc…

✓ Analysis of the PartUpdate-Logfiles for Status, error messages, warnings, etc..

✓ Storage of the Client NX-PartUpdate-Logfiles.

✓ Central control of the PartUpdate processes in a Multisite environment

Benefits Doing PartUpdate

- ✓ After PartUpdate all NX Data are saved in new NX Version
  → Designers working with homogeneous NX Dataversions
- ✓ Released and Partfamily Members will be saved in new Version
  → Designers cannot save them interactive.
- ✓ NX Multisite - Replica Data will also be saved in new Version
  → Designers cannot save them interactive.
- ✓ With PartUpdate you can convert Mating Conditions to assembly constrains.
  → Less work for designers
- ✓ PartUpdate creates all lightweight representations
  → all parts have then lightweight representations
- ✓ Improvement on loading Parts and Assembly's
  → because no conversion is needed during load process.

Benefits of a NX-PartUpdate with the PLMJobManager.

The PLMJobManager organize the conversion of the NX-Data with the NX-PartUpdate utility inside a Teamcenter environment.

- ✓ Unique setup and control of the PartUpdate-Options and Processes.
- ✓ Distribution of the PartUpdate process to multiple computer-clients. (Less PartUpdate process time)
- ✓ Running multiple processes on PartUpdate Client (max. usage of a Client)
- ✓ Avoid „multiple“ PartUpdate of NX-Parts.
- ✓ TC Single and Multisite is supported
- ✓ Process Monitoring Result validation and logging of PartUpdate processes
- ✓ Easy Result Reporting is integrated in JobManager.

System requirements

PLMJobManager JobServer

JobServer:

- Win10 64 bit
- Win Server 2008 - 2016 64 bit
- SQL Database for JobServer Application

PLMJobManager JobClient

JobClient:

- Win10 64 bit
- WinServer 2008 - 2019 64 bit
- with full NX-2tier and TC installation

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