Conflict Resolution – How to Analyze, Handle, and Avoid Integration Conflicts in the SAP NetWeaver Development Infrastructure

Applies to:
SAP NetWeaver 7.0

Summary
All steps of the Java development process are defined in NWDI-based development, and implemented in the UIs. However, as a developer you still have the responsibility to perform all steps of the development process or you may cause incompleteness of functionality or even conflicts in the system. Nevertheless, in case one step – such as releasing an activity is forgotten by its owner (who might for example be on vacation) or not accessible from the original PC (which might have crashed) – it can still be easily found and handled. Conflicts can be found by their owner or in central administration and handled like any other change in the NWDI – including being transported into another workspace with the same problem (e.g. in the maintenance track).

In this article I describe an error in my NWDI demo system, how I found the conflict that caused it and how it was solved, and, finally, how it could have been avoided.

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Author Bio
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A Pretty Common Problem?

I was using my NWDI installation when I noticed that in the CMS Transport Studio the assembly failed; this is not a normal thing to happen, so I tried to find the reason. Later, when I had found it, I heard this two or three times to have happened elsewhere, so this might be interesting for other NWDI users as well, therefore I gathered the screenshots of my steps.

Finding a Conflict

1. It began in the CMS Transport Studio (release was SAP NetWeaver 7.0):

   ![Screenshot](image1.png)

   The assembly of an CMS Transport Studio

2. I opened the Details of the failed assembly to find out more about the problem in the logs:

   ![Screenshot](image2.png)
3. I read there is a conflict in DTR. For a seasoned administrator, two things are momentarily clear (and I came to think of these after a while, too):

- You do the assemble in the **Cons** system, **active** DTR workspace
- You can simply use a DTR report to find out more

4. So I navigated to the DTR system-tools:
Opening the DTR Web UI for administration on the NWDI start page http://<host:port>/devinf

5. In the DTR’s Web UI I opened the Conflict Search under  system-tools  reports  Conflict Search…

6. Started the browser tool to define the starting point for my conflict search…

7. ...browsed to the DTR workspace Cons/active of the Demo company iTelo’s DEMO SC, where the assembly processes failed:
Choosing a workspace to run a report

8. ... and chose the active workspace.
9. Then I adjusted the settings – obviously at the moment open conflicts are of interest – and chose Show to get the result:

Displaying details of a conflict

10. I got displayed a predecessor/successor conflict in a JSP file. I also saw that it was caused by D030... – let's call him Jack – whom I know very well, so I just let him know.

Solving a Conflict

1. In the SAP NetWeaver Developer Studio, the owner of the conflicting file logs on to the development configuration of the consolidation phase, checks the conflict and creates a project containing the file in question:
2. Yes, no doubt, there is a conflict! To be able to do any changes, as you know, a project is needed:

Creating a project to solve a conflict

3. Checking a conflict is the next natural step – it has to be performed by the owner of the object:
Checking the delta in conflicting versions

4. This, the owner has to check semantically, a syntactic analysis would not reveal which version is correct. “Hello World” is not the correct Slogan of ITelO company, so it’s now obvious, what to do: The active version is incorrect, luckily the conflict was noticed!

5. For conflict resolution in this case Accept Colliding is the correct solution (Jack could have created a merge version also, editing the file content in a text editor provided or accept the active version):

Choosing a conflict solution

6. Like any other change, solving a conflict needs an activity. He adds the solution to the activity created for this purpose and checks it in and activates his changes:
Activity creation, check-in and activation of the activity used for the conflict resolution

7. He checks the result of the activation, and, almost immediately, he gets a success message from the CBS, indicating a successful build:
Checking the CBS build process

The last step is to release the activity in the CMS Transport view... however, as we will see, this conflict could have been avoided:

Avoiding a Specific Reason for Conflicts

1. In the Transport view, he finds the conflict’s reason: He forgot releasing a version, so he releases both:

Checking the transport queue of still to be released transports

2. This can be even checked for the whole workspace by any user in the Developer Studio Transport view. He chooses Menu → User Filter → All Users:
No waiting request is shown, but setting the filter to All Users shows foreign requests also

3. This he can even try to release:
Trying to release a foreign – not his own – activities

Because of missing permissions (administrator permissions are required) this fails. However, now he can contact me…

Related Content

- Learn how to solve problems in the CBS also: CBS Secrets Unveiled – Understanding Broken and Dirty DCs
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