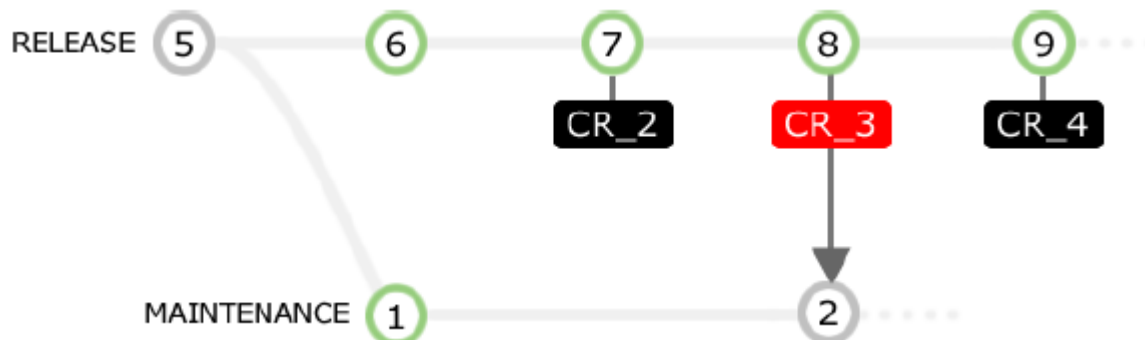


Dimensions 14.2: Cherry Picked Merge Getting Started Guide

Cherry Picking within the context of a merge is a new feature in 14.2 that allows the user to control what historical change information is used to determine the merged result.

The following diagram describes a typical parallel development scenario, deliveries have been made against the release stream, however the merge only requires the changes scoped by a particular request to be merged back into the maintenance stream, in this case request CR_3 which refers to changeset 8.



Cherry-picked merges are best understood by way of a worked example, which covers the following steps:

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Step 1: Create and populate the release stream

Create a new empty directory and place a text file called hello1.txt into it

```
md c:\work\streams\rel1
```

```
echo version1 > c:\work\streams\rel1\hello1.txt
```

Select Stream | New | Stream

General
Give your new stream a name, description and version branch name.

Create a new stream in product:
QLARIUS

Stream name:
REL1

Unique branch name (used to tag versions created in this stream):
rel1 e.g. rel1_1, rel2_0

Description:
Release 1 stream

☐ Create a personal stream

When stream created
☒ Open using work area: c:\work\streams\rel1
☐ Add the new stream to my favorites

Next > Cancel Help

Select Based on nothing and click on **Finish**.

New Stream

Additional Details
Confirm if your new stream will be an empty stream or based on an existing stream or baseline and if CM rules are to be enabled.

Based on
☒ Nothing (empty stream)
☐ Based on stream
MAINT1 Select...
☐ Copy build configuration
☐ Based on baseline

Change management rules
☐ Valid request must be specified when delivering changes

< Back Next > Finish Cancel Help

Select Stream | Deliver into Stream, click on **Next**

Deliver to Stream
This wizard will walk you through the steps needed to deliver changes in your work area to the repository.

Deliver to: QLARIUS:SH1

Include the following types of changes:
☒ Additions ☐ Deletions ☒ Modifications ☒ Moves/Renames

Filter using wildcards (optional)
Include local files: Specify criteria here: e.g. *.cpp|*.h|build\c*.c|build_**.txt|*
Exclude local files: *|Debug|Release|bin|obj|pch|user|.ncb|.suo|.mscc|.opensdf|.sdf|.aps|.class|.jar|.war|.e


>>> Show additional options

About... < Back Next > Cancel Help

Add a comment *First Delivery* and click on **Next** and then click on **Deliver**.

Deliver - [C:\work\streams\rel1]

Please review the list of changes below and take appropriate action.



Work Area Filename	Change Type	Resolution	Repository Filename
C:\work\streams\rel1\hello1.txt	Addition	Accept	

Deliver: Work area: C:\work\ Selected: 1 Differences: 1 Locked: 0 Conflicts: 0 Unresolved: 0

Default options **Apply to all relevant changes (unless overridden)**

Comment	First delivery
Relate to request(s)	<None>
Design part for new files	<Use default>
Permissions after Deliver	Keep unchanged
Expand substitution variables	No

☒ Defaults ☐ Options ☐ Properties

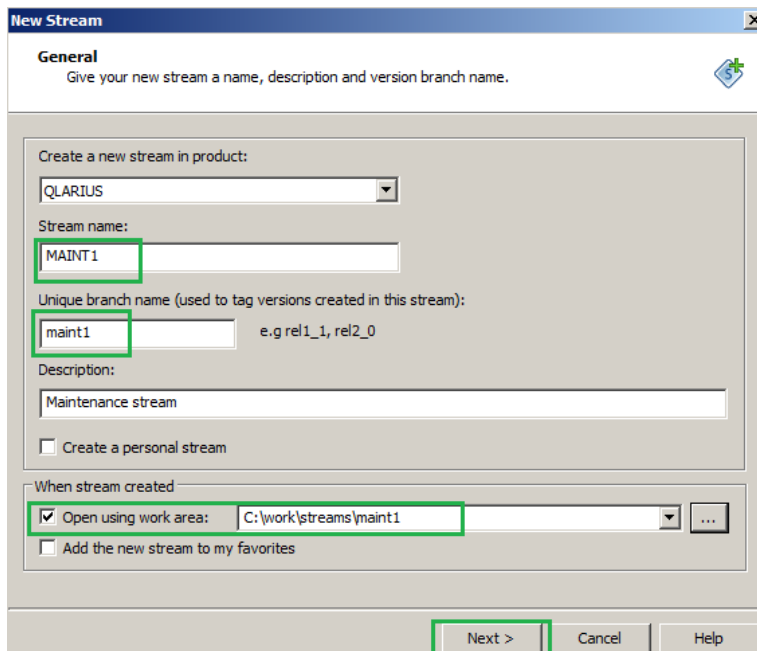
< Back Deliver Cancel Help

Step 2: Create Maintenance stream based on the Release stream

Select **Stream** | **New** | **Stream**

Name: **MAINT1** branch name: **maint1**

Specify a work area such as **c:\work\streams\maint1** and click on **Next** and confirm the creation of the new directory.



New Stream

General
Give your new stream a name, description and version branch name.

Create a new stream in product:
QLARIUS

Stream name:
MAINT1

Unique branch name (used to tag versions created in this stream):
maint1 e.g rel1_1, rel2_0

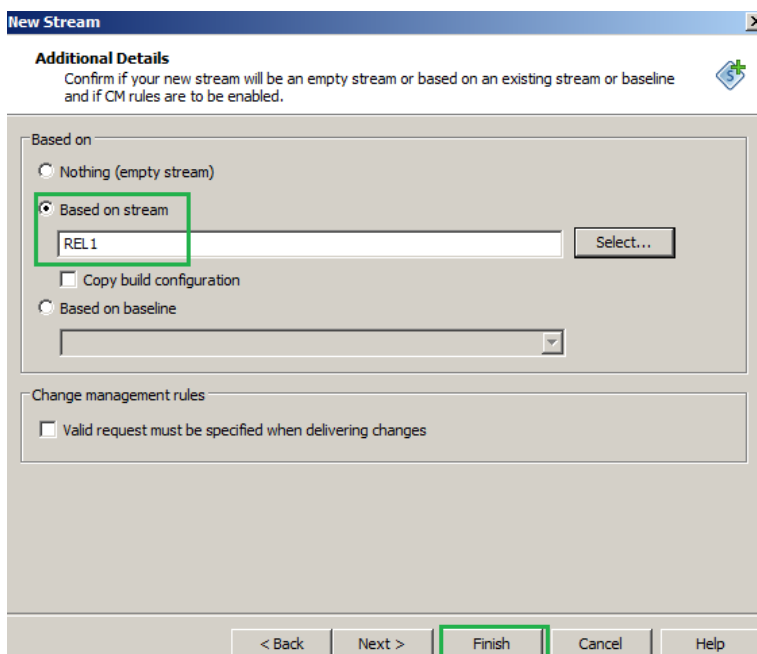
Description:
Maintenance stream

☐ Create a personal stream

When stream created
☒ Open using work area: C:\work\streams\maint1
☐ Add the new stream to my favorites

Next > Cancel Help

Ensure based on stream is defined as the Release stream created in step 1



New Stream

Additional Details
Confirm if your new stream will be an empty stream or based on an existing stream or baseline and if CM rules are to be enabled.

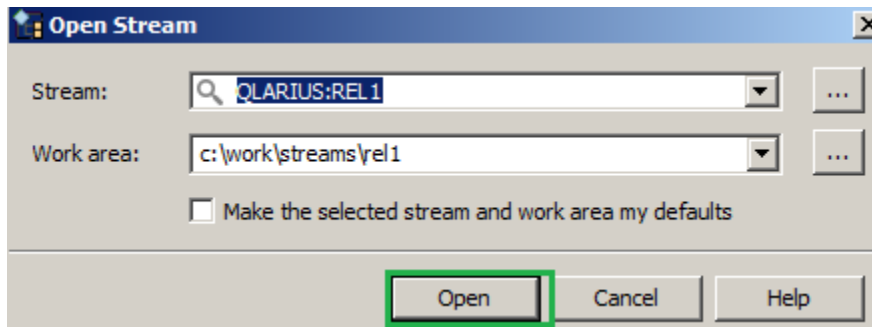
Based on
☐ Nothing (empty stream)
☒ Based on stream
REL1 Select...
☐ Copy build configuration
☐ Based on baseline

Change management rules
☐ Valid request must be specified when delivering changes

< Back Next > Finish Cancel Help

Step 3: Return to the Release stream

Select **Stream | Open Stream** and select the Release stream **REL1** and click on **OK**.



Step 4: Create the first request

Select **File | New | Request**

Specify the type **CR** and Title: **version 2**

Click on **Edit Detailed Description** and specify a description such as *version 2 description*

Then click on the **Attribute** tab

New Request

General | Relationships | Attributes | Attachments

Product: QLARIUS Type: CR

To be addressed in Stream: QLARIUS:REL1 Find Stream

Title: version 2

Prime Details

☐ Based on request: Relationship: Dependent

Description file: C:\Users\ADMINI~1\AppData\Local\Temp\2\pt3a83.H1 Edit detailed description

☐ Save as draft (do not enter into the system)

☐ Lock ownership to this site (for replication use only)

☐ Keep open Create Cancel Help

Specify the Severity and then click on **Create**

New Request

General | Relationships | Attributes | Attachments

Role Section: \$ORIGINATOR

Attributes	Values
Severity/Priority	Medium
Estimated dev. effort (hours)	
Estimated completed date	
Raised By	
Contact details	Add
Defer Reason	

Choose severity/priority

☐ Keep open Create Cancel Help

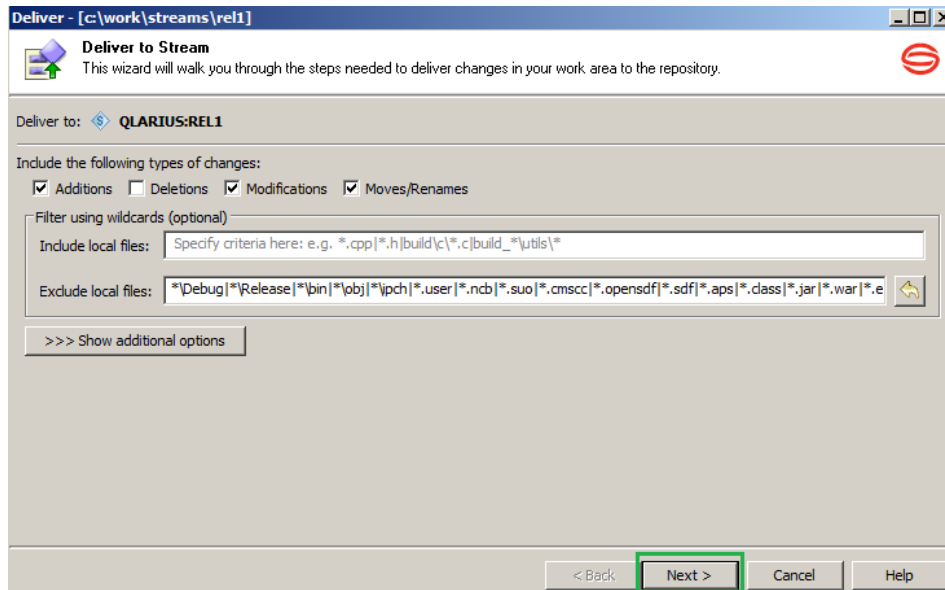
Click on **OK** to dismiss the confirmation dialog.

Step 5: Modify and deliver the version 2 changes with the first request

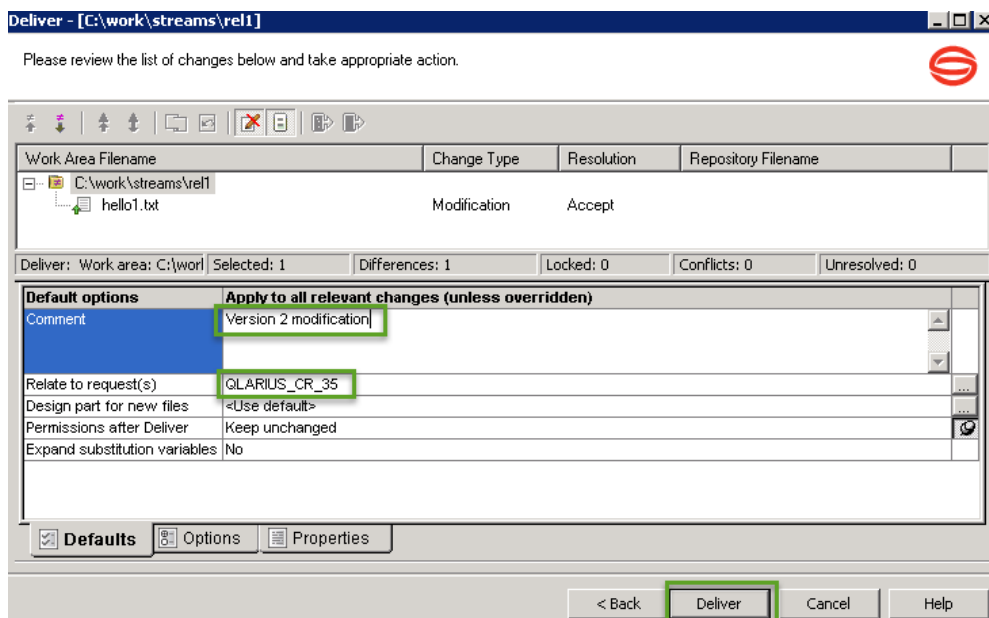
Run the following command to create the second version of hello1.txt, by adding an additional line.

```
echo version2 >> c:\work\streams\rel1\hello1.txt
```

In Desktop Client select **Stream | Deliver into stream** and click on **Next**.



Specify a comment, relate the request created in [Step 4](#) then click on **Deliver**.



Step 6: Create the second request

Select File | New | Request

Specify the type **CR** and Title: **version 3**

Click on **Edit Detailed Description** and specify a description such as *version 3 description*

Then click on the **Attribute** tab

The 'New Request' dialog box is shown with the 'Attributes' tab selected. The 'Product' dropdown is set to 'QLARIUS' and the 'Type' dropdown is set to 'CR'. The 'To be addressed in Stream:' field contains 'QLARIUS:REL 1'. The 'Title' field contains 'version 3'. The 'Description file' field contains a file path, and the 'Edit detailed description' button is highlighted. The 'Relationship' dropdown is set to 'Dependent'. The 'Keep open' checkbox is unchecked. The 'Create', 'Cancel', and 'Help' buttons are at the bottom.

Specify the **Severity** and then click on **Create**

The 'New Request' dialog box is shown with the 'Attributes' tab selected. The 'Role Section' dropdown is set to '\$ORIGINATOR'. The 'Attributes' table is displayed with the following data:

Attributes	Values
Severity/Priority	Medium
Estimated dev. effort (hours)	
Estimated completed date	
Raised By	
Contact details	Add
Defer Reason	

The 'Create' button is highlighted. The 'Keep open' checkbox is unchecked. The 'Create', 'Cancel', and 'Help' buttons are at the bottom.

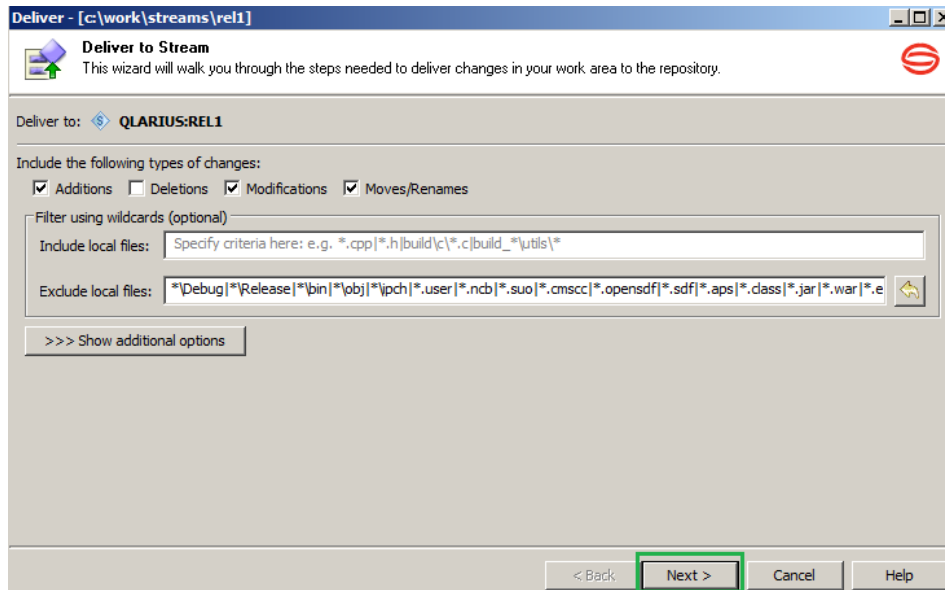
Click on **OK** to dismiss the confirmation dialog.

Step 7: Modify and deliver the version 3 changes with the request

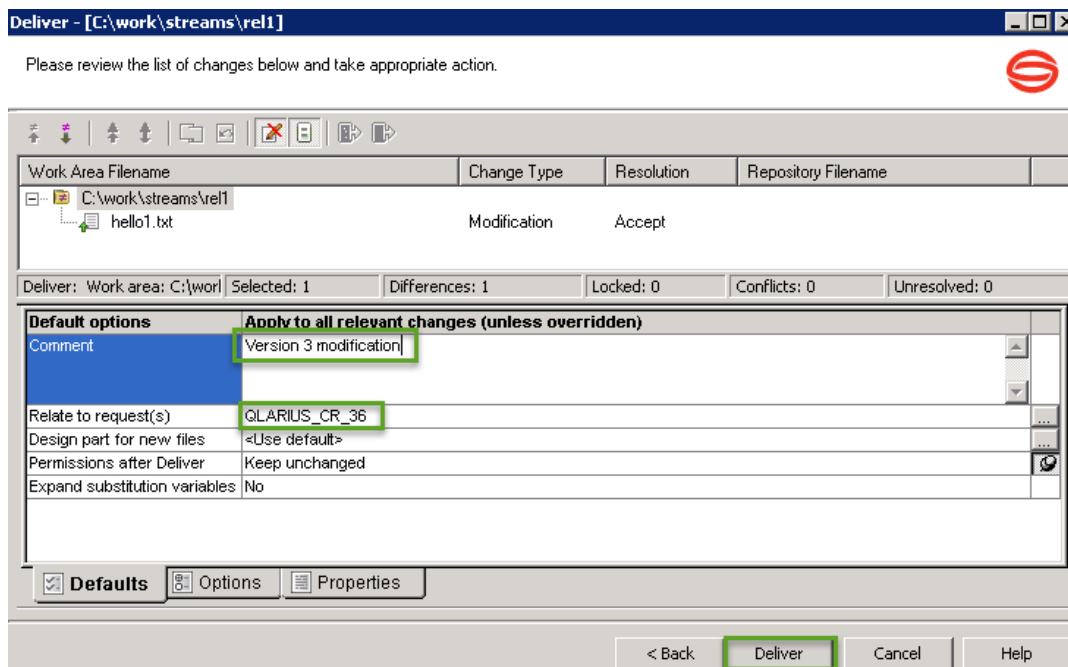
Run the following command to create the third version of hello1.txt, by adding a third line to the file

```
echo version3 >> c:\work\streams\rel1\hello1.txt
```

In Desktop Client select **Stream | Deliver into stream** and click on **Next**.



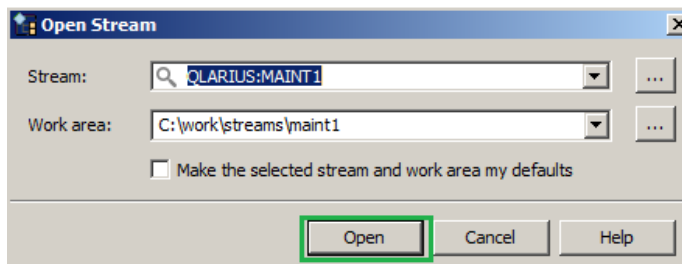
Specify a comment, relate the request created in [Step 6](#) then click on **Deliver**.



Step 8 Merge using the second request

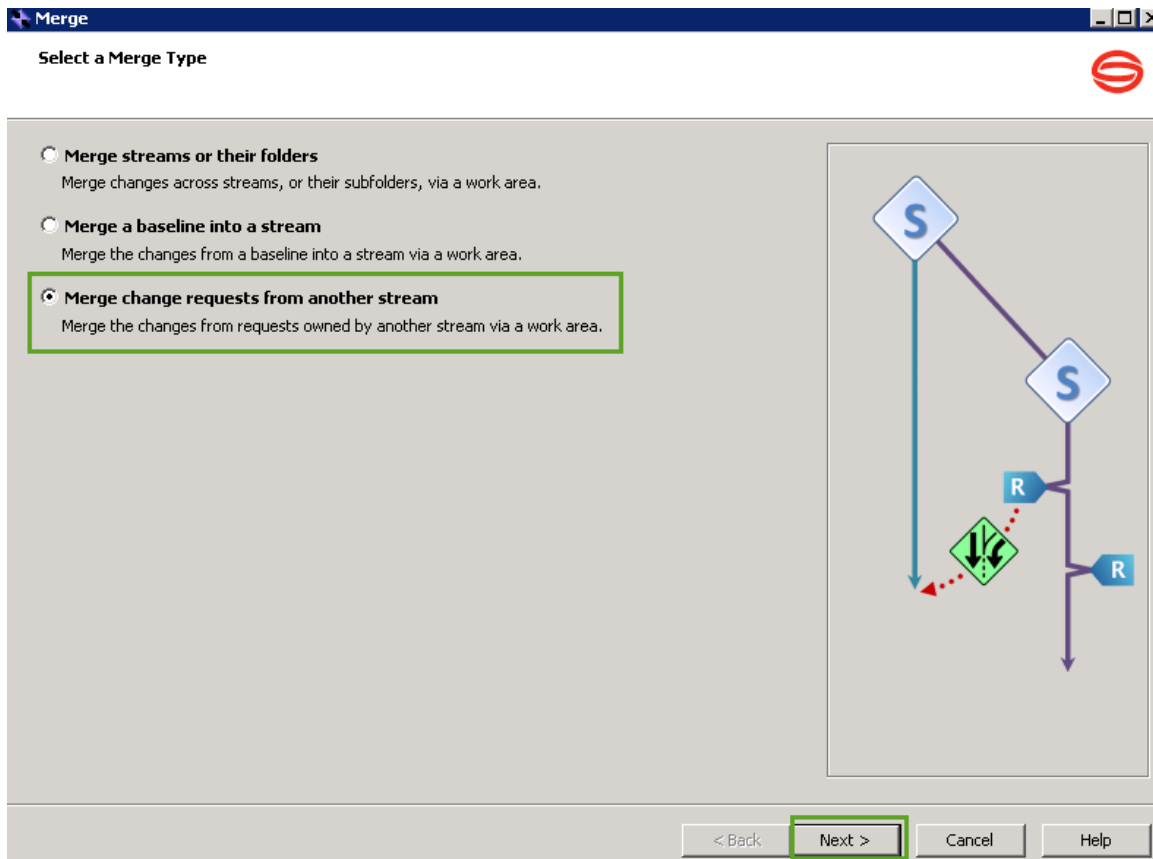
We are now going to merge only the changes associated with the second request.

Open the maintenance stream



Select Stream | Merge

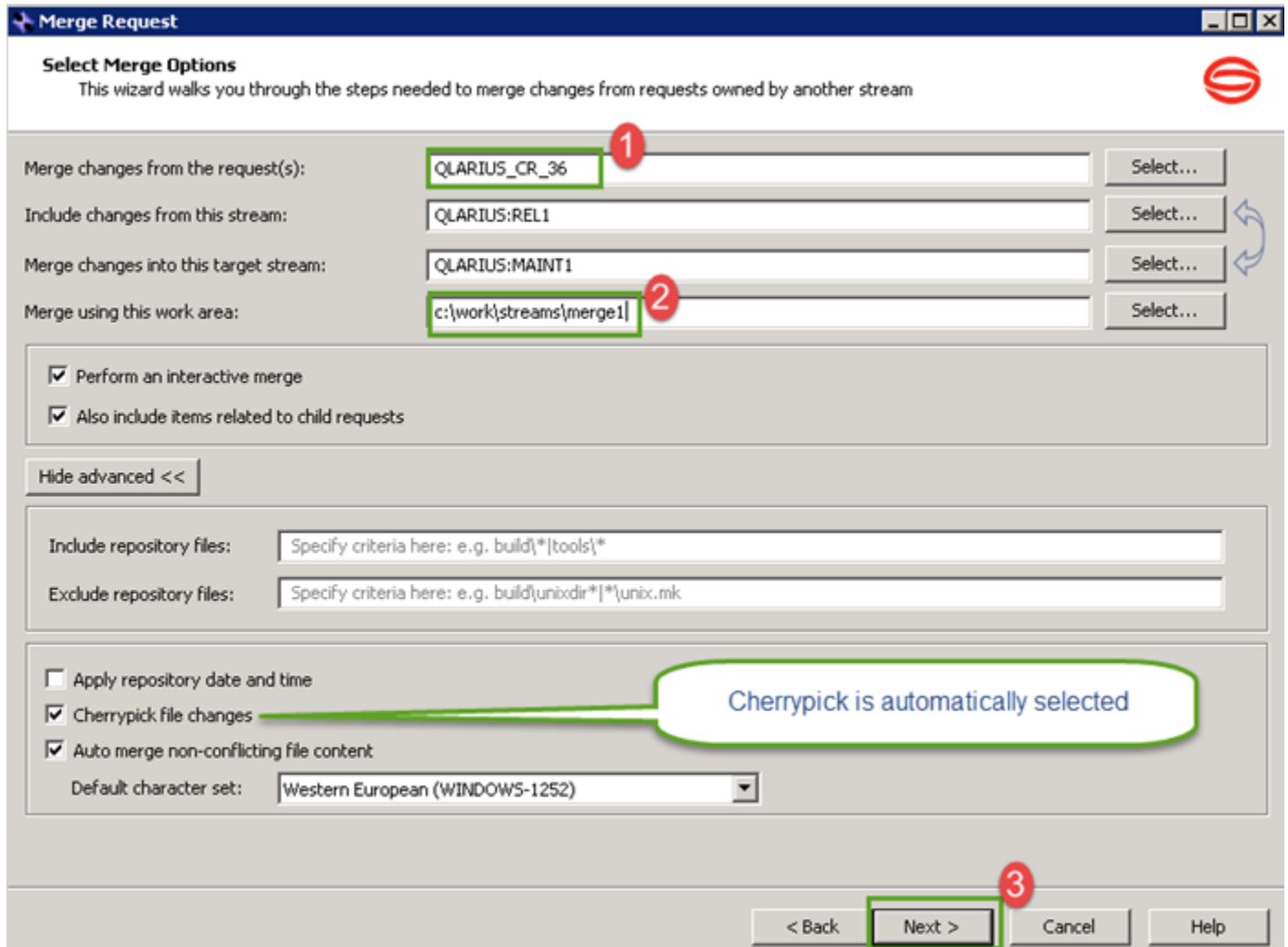
Select the **Merge change request from another stream** radio button and click on **Next**



Specify the Version 3 request that was created in [step 6](#)

Define a new work area: `c:\work\streams\merge1` and click on **Next**.

Note: the *Cherrypick* option is selected by default.



Merge Request

Select Merge Options
This wizard walks you through the steps needed to merge changes from requests owned by another stream

Merge changes from the request(s): Select...

Include changes from this stream: Select...

Merge changes into this target stream: Select...

Merge using this work area: Select...

☒ Perform an interactive merge
☒ Also include items related to child requests

Hide advanced <<

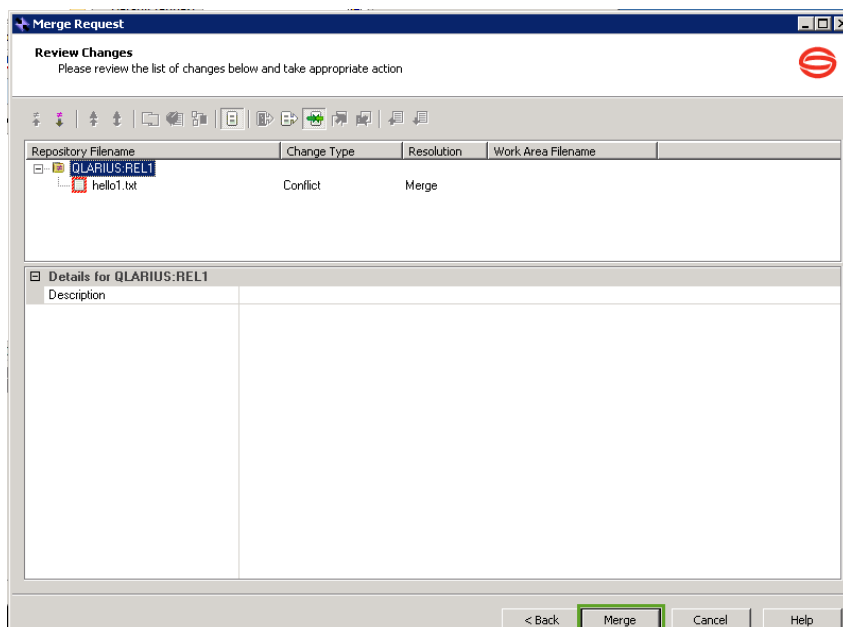
Include repository files:

Exclude repository files:

☐ Apply repository date and time
☒ Cherrypick file changes
☒ Auto merge non-conflicting file content
Default character set:

< Back **Next >** Cancel Help

The next dialog confirms a conflict, click on **Merge** to continue.



Merge Request

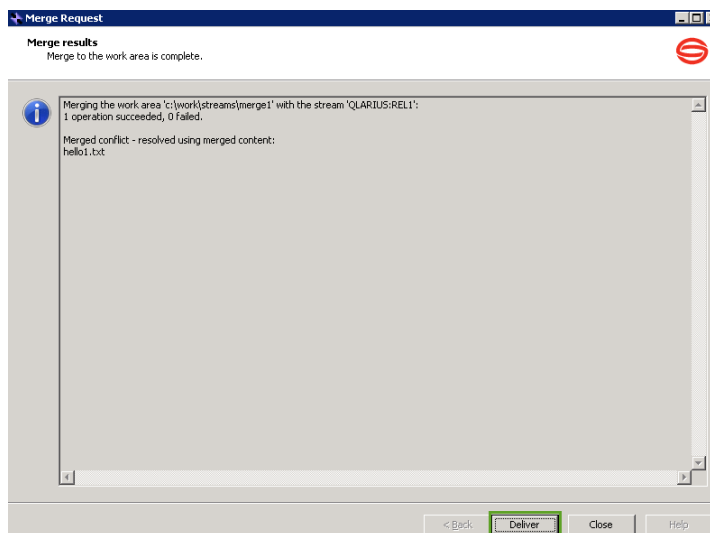
Review Changes
Please review the list of changes below and take appropriate action

Repository Filename	Change Type	Resolution	Work Area Filename
QLARIUS:REL1 hello1.txt	Conflict	Merge	

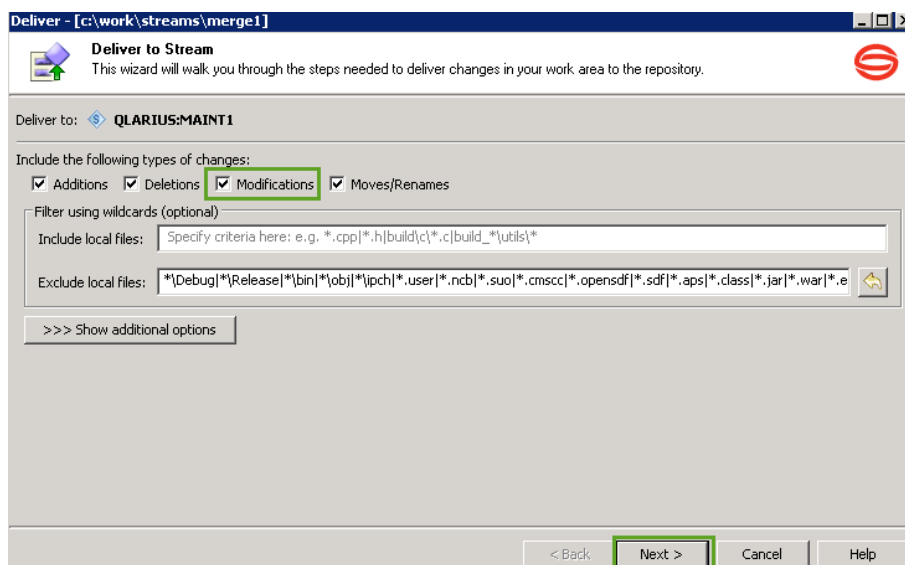
Details for QLARIUS:REL1
Description

< Back **Merge** Cancel Help

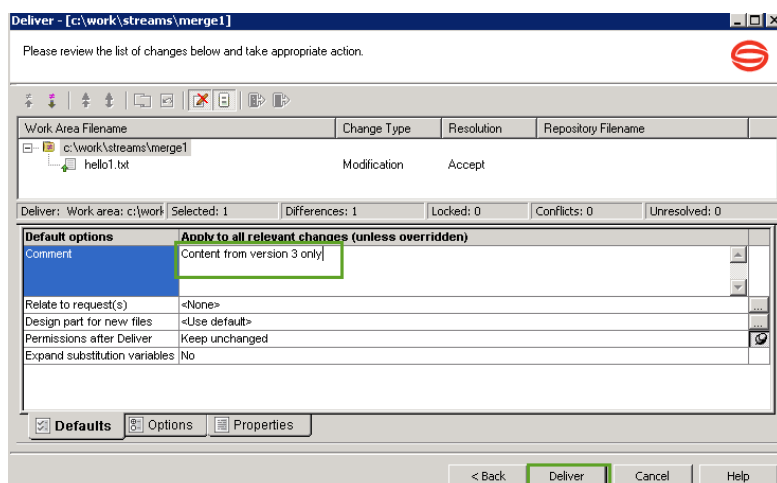
On the next screen specify **Deliver**



Ensure **Modifications** is highlighted then click on **Next**



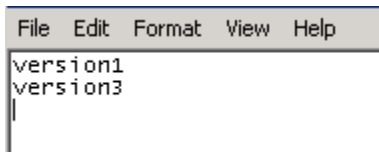
Supply a comment and click on **Deliver**.



Step 9 Review the results

Refresh the desktop client view and the maint#1 revision for hell1.txt should now appear.

Right click on the maint#1 revision and select **Browse** and the following content should appear

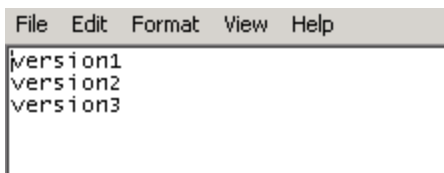


A screenshot of a text editor window with a menu bar containing 'File', 'Edit', 'Format', 'View', and 'Help'. The text area contains the following content:

```
version1  
version3  
|
```

The merge has only derived content from the request specified, the changes defined in version 2 and the related request have not been applied.

Note: If the Cherry pick option had not been selected then the revision from the Release stream would have been added to the merge stream, and the browse revision would have contained the following



A screenshot of a text editor window with a menu bar containing 'File', 'Edit', 'Format', 'View', and 'Help'. The text area contains the following content:

```
version1  
version2  
version3  
|
```

End of Document