Getting Acquainted with AccuRev

(AccuRev 3.5.5)

This guide gets you acquainted, quickly and easily, with AccuRev — the new generation configuration management software with integrated issue management ("Dispatch") — from AccuRev, Inc. Please note that a "Full" product installation of AccuRev should be completed prior to using this guide.

You will first learn how to populate a "depot" — a repository of files under AccuRev version control. You will then go through typical Developer and Release Engineer experiences using AccuRev configuration management, followed by setup of Dispatch, AccuRev's integrated issue management system.

This guide does not attempt to provide exhaustive explanations of product features. For full details, see the AccuRev documentation set, which you can download from *http://www.accurev.com*. The manuals are in PDF format, and can be viewed using Acrobat Reader.

The support team at AccuRev, Inc. is available to help you at any time as you get acquainted with our software. So please don't hesitate to contact us with any questions and/or comments via email at **support@accurev.com**.

Throughout this guide, the symbol "➩"denotes a command or set of commands to be selected from the AccuRev GUI's main command menu, one of the GUI's toolbars, or an individual object's context ("right-click") menu. For example: "➩ Help ➩ Quick Setup" indicates that you should select the **Help** command from the main menu and then select **Quick Setup**.

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A. Initial Setup

In this section, we'll use AccuRev's "Quick Setup Wizard" for initial data setup. If you prefer the do-it-yourself approach, using individual AccuRev commands, please follow the procedure in Appendix A.

Operation A1: <u>Starting the AccuRev Graphical User Interface</u>

Step 1: Double-click the AccuRev icon on your desktop,
or
In a command shell (or "DOS") window: **acgui**

Operation A2: <u>Using the Quick Setup Wizard</u>

Step 1: Find a directory of files that you'd like to place under version control. (It's OK if it has subdirectories.) This data won't be modified — the Wizard will make a copy of it. Note the pathname of this directory for use in the next step.

Step 2: Enter command: ↳ Help ↳ Quick Setup

AccuRev's Quick Setup Wizard walks you through the following steps:

Step 2a: Creating an AccuRev username

Step 2b: Creating a new storage repository (depot)

Step 2c: Creating a workspace for yourself, and copying data files to the workspace. Make these choices:

- Select **Yes** when asked "Do you have files that you would like to import into AccuRev?"
- Select **Yes** when asked "Do you want to create a workspace in a new location …?"
- Indicate the directory you selected in Step 1 when prompted "Where are the files stored …"
- Accept AccuRev's suggestion for the location of the new workspace

Step 2d: Adding the files in your workspace to the depot:

- Click **Promote** in the Promote window

After completing the initial setup, you can proceed to use any of the remaining three sections of this guide:

Section B: Perform the AccuRev operations that a Developer uses most frequently

Section C: Perform the AccuRev operations that a Release Engineer or Quality Engineer uses most frequently

Section D: Work with Dispatch issue management

B. Developer Experience

The Developer experience includes accessing workspaces, creating new versions of files (edit/keep/promote), updating workspaces, and merging two versions of a file.

Operation B1: **Going to your workspace**

Comment: *Perform this step if your workspace is not already open in the AccuRev GUI*

Step 1: ↳ File ↳ Open ↳ Workspace

Step 2: Select the workspace that you created in Operation A1 above

Note: *All of the files in your workspace have a status of "backed". This means that you have not yet modified these files.*

Operation B2: **Editing one of your source files**

Step 1: Select a file to edit

Step 2: ↳ Right-Click ↳ Edit

Step 3: Make some changes to your source file

Step 4: Save the file, and close the editor

Note: *You did not have to "check out" the file before editing it. The status of the file is now "modified".*

Operation B3: **Keeping your modified file**

Comment: *The "Keep" operation is a "private checkin". It makes a copy of your modified file in secure storage maintained by the AccuRev Server process. It also records the creation of a new "version" of the file in the Server's database. Keeping new versions in the workspace enables you to checkpoint and backup your own code, while preventing your changes from being seen by other developers.*

Step 1: Select the file you modified

Step 2: ↳ Right-Click ↳ Keep

Step 3: Enter a comment, and click Ok

Note: *The status of the file is now "kept"*

Operation B4: **Promoting your kept file to share your changes with the rest of the group**

Comment: *The "Promote" operation allows you to share your changed file with other users.*

Step 1: Select the file you just modified and kept

Step 2: ↳ Right-Click ↳ Promote

Step 3: Enter a comment, and click **Ok**.

Note: Promote makes the version that you created with "Keep" available to be copied into other users' workspaces. The status of the file is once again "backed".

Operation B5: **Creating a second workspace**

Step 1: ↳ File ↳ New ↳ Workspace

Step 2: From the List of Depots, select your depot

Step 3: As the Basis Stream, select the stream with the same name as the depot

Step 4: Click Next

Step 5: As the Name of Workspace to Create, enter a new name (Example: **acme2**)

Step 6: Click Next

Step 7: Click Next again (to accept various defaults)

Step 8: As the Physical Location for the new workspace, choose an existing directory (Example: **C:\Documents and Settings\Derek** or **/usr/home/derek**)

Step 9: Click Next

Step 10: Select the second pathname, to create a new directory with the name you chose for the workspace

Step 11: Click Finish

Operation B6: **Working on additional files in the second workspace**

Comment: The Searches View can list all the files that you are currently working on.

Step 1: Select a text file to edit in your second workspace

Step 2: ↳ Right-Click ↳ Edit

Step 3: Make some changes to your text file

Step 4: Save the file, and close the editor

Step 5: Repeat steps 1-4 on one or more additional files

Step 6: Click the Searches View  toolbar button

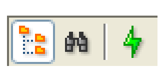
Step 7: Select the Pending search

Step 8: Select the file(s) you modified

Step 9: ↳ Right-Click ↳ Keep

Step 10: Select the same file(s)

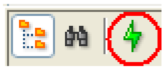
Step 11: ↳ Right-Click ↳ Promote

Step 12: Click the Directory View  toolbar button (just to prepare for further work)

Operation B7: <u>**Switching back to your first workspace**</u>

Step 1: Click the tab in the GUI window that contains your first workspace

Comment: *If you have closed that tab, re-open the workspace using: ↳ File ↳ Open ↳ Workspace.*

Step 2: Click the Update  toolbar button

Note: This brings the changes you promoted while working in your second workspace into your first workspace.

Operation B8: <u>**Merging two versions of a file**</u>

Step 1: In your first workspace select a file to edit

Step 2: ↳ Right-Click ↳ Edit

Step 3: Make some changes to your text file, save the file, and close the editor

Step 4: Select the file

Step 5: ↳ Right-Click ↳ Keep

Step 6: Select the file

Step 7: ↳ Right-Click ↳ Promote

Step 8: Switch to your second workspace. Don't perform an Update

Step 9: Edit the <u>SAME</u> file

Note: The file's status is now "overlap". (The yellow highlight emphasizes this.) This means that someone else has promoted a version before you did. The "someone else" is you, working in your first workspace. The file in your second workspace requires a merge before you can promote it.

Step 10: Select the file

Step 11: ↳ Right-Click ↳ Merge

Step 11a: Proceed to merge the file, using the graphical Merge tool. The only toolbar buttons you need are ⇩ and ⇧ (to navigate from conflict to conflict), along with ⇦ and ⇨ (to resolve the current conflict, by selecting text from one of the versions). You finish the Merge by preserving the merged file with a Keep.

Note: For more guidance, see chapter "The AccuRev Diff and Merge Tools" in the AccuRev User's Guide (GUI).

Step 12: Select the file

Step 13: ↳ Right-Click ↳ Promote

C. Release Engineer / Quality Engineer Experience:

The AccuRev experience for a Release Engineer or Quality Engineer includes working with the StreamBrowser™, creating new streams and snapshots, comparing streams, and rearranging the stream hierarchy.

Operation C1: **Launching the StreamBrowser**

Comment: *This allows you to easily see and control your development stream hierarchy graphically using AccuRev's "Total Graphical Control" capability.*

Step 1: ↳ View ↳ Streams

Step 2: In the choice box at the bottom of the window, make sure that **All Workspaces** is selected. This includes your "private" workspace streams in the display.

Note: *At this point there is only one "public" development stream. It has the same name as your depot and is known as the depot's "base stream" or "root stream".*

Operation C2: **Creating a snapshot stream to capture the current state of development**

Step 1: Select the depot's base stream

Step 2: ↳ Right-Click ↳ New Snapshot

Step 3: Give the new snapshot a name (Example: **acme_1.0**)

Step 4: Leave the Date & Time set to **Now**

Step 5: Click Ok

Note: *The newly created snapshot stream appears in the StreamBrowser.*

Operation C3: **Creating an integration stream based on the base stream**

Comment: *Now, rather than having to promote directly into the base stream you can promote to an integration stream that is based on the base stream.*

Step 1: Select the base stream

Step 2: ↳ Right-Click ↳ New Stream

Step 3: Give the new stream a name (Example: **acme_int**)

Step 4: Leave the Stream Type set to **Regular stream**.

Step 5: Leave the Date & Time set to **None**

Step 6: Click Ok

Note: *The newly created integration stream appears in the StreamBrowser, as a direct "child" of the base stream.*

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Operation C4: **Reparenting your workspaces**

Comment: *Using AccuRev's Total Graphical Control capability you can easily "reparent" your workspaces, so that they are based on the integration stream, rather than the base stream. (Example: reparent them from* ***acme*** *to* ***acme_int****)*

Step 1: Drag and drop one of your workspace streams onto the integration stream

Step 2: Drag and drop the other workspace stream onto the integration stream

Note: The StreamBrowser shows that your workspace streams are now based on the integration stream.

Operation C5: **Updating your workspace**

Comment: *Execute the following steps for each workspace that you have just reparented.*

Step 1: Double-click the workspace to open it

Step 2: Click the Update toolbar button

Note: An Update is always required after reparenting a workspace.

Step 3: Select a file in your workspace that is now based on the integration stream

Step 4: ↳ Right-Click ↳ Edit

Step 5: ↳ Right-Click ↳ Keep

Step 6: ↳ Right-Click ↳ Promote

Note: This promotes the new version of the file to the integration stream. The development process remains the same no matter which stream the workspace is based on: ↳ Edit; ↳ Keep; ↳ Promote.

Step 7: (optional) Edit/Keep/Promote additional files

Operation C6: **Promoting your changes from the integration stream to the base stream**

Step 1: Switch back to the StreamBrowser tab (Example: **acme**)

Step 2: Click the arrow just below the integration stream (Example: **acme_int**)

Note: This opens a window showing the file(s) you just promoted to the integration stream.

Step 3: Select all of the files

Step 4: ↳ Right-Click ↳ Promote

Note: The files have now been promoted from the integration stream to the base stream.

Operation C7: **Creating a second snapshot of the base stream**

Step 1: Select the base stream

Step 2: ↳ Right-Click ↳ New Snapshot

Step 3: Give the second snapshot stream a name (Example: **acme_2.0**)

Step 4: Leave the Date & Time set to **Now**

Step 5: Click Ok

Note: The newly created snapshot stream appears in the StreamBrowser.

Operation C8: **Comparing the contents of the two snapshot streams**

Step 1: Select the first snapshot stream (Example: **acme_1.0**)

Step 2: ↳ Right-Click ↳ Show Difference ↳ By Files

Note: A "show difference" icon is added to the mouse pointer.

Step 3: Click on the second snapshot stream (Example: **acme_2.0**)

Note: A list appears, containing the files you promoted from the first snapshot stream.

Operation C9: **Observing the differences between snapshots at the individual-file level**

Step 1: Select a file from the differences list you just generated

Step 2: ↳ Right Click ↳ Show Difference

D. Dispatch Example Usage

The Dispatch experience includes setting up an issues database format (“schema”), creating issue records, querying the issues database, and using the “change package” integration between configuration management and issue management.

Operation D1: **<u>Setting up the default schema</u>**

- **Step 1:** ↳ Issues ↳ Schema Editor
- **Step 2:** Click Yes (”Do you want to use the default schema?”)
- **Step 3:** Click Ok (“Please note …)
- **Step 4:** Click Save (lower right-corner of Schema Editor tab)

Operation D2: **<u>Creating a few new issues</u>**

- **Step 1:** ↳ Issues ↳ New Issue
- **Step 2:** Enter data in all of the required fields (red labels)
- **Step 3:** Experiment with how the different types of fields manage various types of data
- **Step 4:** Click Save & Close to save the issue record and close the tab
- **Step 5:** Repeat this process a few times so you have a few issues to work with

Operation D3: **<u>Creating a query and making it your default query</u>**

- **Step 1:** Enter command: ↳ Issues ↳ Queries
- **Step 2:** Click New Query to create an empty new query
- **Step 3:** Give your query a name by clicking its name "New Query 1" twice (with a short pause in between) and then typing the name (e.g. **All Defects**)
- **Step 4:** Click Click here to add…
- **Step 5:** Set the first choice box value to **issueNum**
- **Step 6:** Set the second choice box value to **greater than or equal to**
- **Step 7:** Enter the number **1** in the third query box
- **Step 8:** Click Ok

  Note: The name of the new query appears in the left (Query List) pane, which lists all the queries that you’ve created. The right (Query Results) pane shows the results of running the query against the issues database.
- **Step 9:** In the Query List pane, with the query you just created …
  ↳ Right-Click ↳ Set as Default
- **Step 10:** Click the Columns toolbar button in the Query Results pane

Step 11: Select additional fields to appear in the Query Results pane:

Step 11a: Select a field from the **Available** list (Ex: **shortDescription**)

Step 11b: Click the right-arrow button ➡ to move the field to the **Selected** list

Step 11c: Repeat the steps above for all of the fields you wish to add to the query results output

Step 11d: Click Ok

Step 12: Click Save all queries above the left pane to save your query

Step 13: Close the query tab by clicking the tab control itself … ➪ Right Click ➪ Close

Step 14: Reopen a query tab: ➪ Issues ➪ Queries

Note: The query you just created runs automatically, because you set it as your default query.

Operation D4: **Enabling the built-in integration between AccuRev configuration management and Dispatch issue management**

Step 1: ➪ Issues ➪ Schema Editor (or return to the existing Schema Editor tab)

Step 2: Go to the Change Packages tab

Step 3: In the Change Package Results section (top part), click Setup Columns

Step 4: Select some fields from the **Available** list (Ex: **issueNum**, **shortDescription**), and click the right-arrow button ➡ to move the fields to the **Selected** list

Step 5: Click Ok

Step 6: In the Change Package Triggers section (bottom part), click New trigger in the toolbar

Note: A new window opens, in which you specify a condition, along with a query to be performed if that condition is satisfied when the integration is invoked.

Step 7: In the Condition section (top part), click Click here to add…

Step 8: Use the three choice boxes to form this condition:

PROMOTE_DEST_STREAM is in hierarchy <*depot*>

*Note: **<depot>** is the name of your depot.*

Step 9: In the Query section (top part), click Click here to add…

Step 10: Use the choice boxes and the text field to form this condition:

issueNum greater than 0

Note: This query selects all issue records.

Step 11: Click Ok

Step 12: Click Save (lower right-corner of Schema Editor tab)

Step 13: Open a workspace in the GUI (or go to one that is already open)

Step 14: Edit and Keep several files

Step 15: Promote all those files

Note: The integration evalutes the condition you defined in Step 8 (it's TRUE), then runs the query you defined in Step10. The selected records are presented as a list of issues to choose from.

Step 16: Select the issue that you want to associate the promoted files with, and click Ok

Step 17: ↳ Issues ↳ Look Up

Step 18: Enter the number of the issue you chose when promoted by the integration (Step 16) , and click Ok

Note: The issue appears in an edit form.

Step 19: Go to the Changes tab

Note: The files that you promoted are listed on this tab. The specific versions that you promoted are noted in the ***Version*** *column.*

Operation D5: **Turning off the integration between configuration management and issue management**

Step 1: ↳ Issues ↳ Schema Editor (or return to the existing Schema Editor tab)

Step 2: In the Change Packages tab, click the condition/query pair to select it

Step 3: Click Delete trigger

Step 4: Click Save (lower right-corner of Schema Editor tab)

Note: With no query to be invoked at Promote time, the integration is effectively disabled.

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Appendix A

E. Initial Setup Without Using the Quick Setup Wizard

Operation E1: **Create an AccuRev username and password**

Step 1: ↳ Tools ↳ Security

Step 2: ↳ Add User

Step 3: Enter a username and password

Note: Creating a password is optional. We recommend that you do not create a password during your Getting Acquainted tour.

Step 4: Click Ok

Step 5: ↳ Tools ↳ Change Active User

Step 6: Select your newly created user

Step 7: Click Ok

Step 8: If you created a password for the user:

- **Step 8a:** Click Set Password and type in the password
- **Step 8b:** Check the **Update local password only** checkbox
- **Step 8c:** Click Ok

Operation E2: **Create a new storage depot (a repository of files under AccuRev control)**

Step 1: ↳ File ↳ New ↳ Depot

Step 2: Give the depot a name (Example: **acme**)

Step 3: Click Ok (and continue to the next operation)

Operation E3: **Create a workspace to store your work**

Step 1: Click Yes ("Do you want to create a workspace for the depot?")

Step 2: Click Next to select your newly created depot, and the stream that has the same name as the depot

Step 3: Click Next to accept the default name for the workspace

Step 4: Click Next to accept defaults for the new workspace

Step 5: Choose a physical location for the workspace (Example: **C:\ws\acme**)

Step 6: Click Next

Step 7: Select the pathname you prefer from the two pathnames offered

Step 8: Click Finish

Operation E4: **Import files into your workspace**

Step 1: Use operating system commands to copy some sample files into workspace. (Example: **xcopy /E /Y c:\myfiles\src* c:\ws\acme**)

Operation E5: **Add the files in your workspace to the depot**

Comment: *If your newly created workspace is not already open in the AccuRev GUI, open it: ↳ File ↳ Open ↳ Workspace*

Step 1: Click the Searches View  toolbar button

Step 2: Select the External filter

Note: This may take a few minutes to populate if you copied a lot of files into your workspace.

Step 3: Select one of the files in the right-hand pane ("details pane")

Step 4: ↳ Edit ↳ Select All

Step 5: ↳ Right-Click ↳ Add to Depot

Step 6: (optional) Enter a comment string

Step 7: Click Ok

Step 8: Select the Pending filter

Step 9: As above, select all the files listed in the details pane

Step 10: ↳ Right-Click ↳ Promote

Step 11: (optional) Enter a comment string

Step 12: Click Ok

Step 13: Click the Directory View  toolbar button

Step 14: Click the Update  button to update your workspace

Note: This may take a minute or so the first time you update after importing a large number of files but will greatly improve filter performance.