1 Installation and Configuration

This section explains how to install, configure, and update Deskzilla. Please, refer to the subsections for the required information.

1.1 Requirements

- **Server:** Bugzilla, version 2.14 — 4.0
  - You can install Deskzilla to access already existing Bugzilla installations, such as publicly available Bugzilla servers for numerous open-source projects. If you plan to start your own server, you should install Bugzilla first (http://almworks.com/vbs/overview.html).
  - No server-side patches required.
  - **Note**: Bugzilla servers with localized interfaces are not yet supported (Deskzilla may work anyway, please try and let us know if there are problems).
- **Additional server authentication**: Basic HTTP, Digest, NTLM (versions 1 & 2).
- **Operating System**: Microsoft Windows XP/2003/Vista/7, Linux, Apple Mac OS X (Leopard, Snow Leopard, or later) or any other that supports Java 6.
- **System Memory**: 256 MB required, 512 MB recommended
- **Hard Drive Space**: 150 MB required, 300 MB recommended
- **Screen Resolution**: 1024x768 or better
- **Displays**: multiple displays are supported, but Deskzilla should be restarted when a display is connected or disconnected.
- **Java**: If you downloaded a distribution without bundled Java, you need Java 6 or later available at java.com (http://www.java.com/en/download/manual.jsp).

1.2 Installation Process

To install Deskzilla:

1. Download Deskzilla installation file for your operation system (Windows, Linux, or Mac OS X).
2. Depending on you operation system:
   1. **For Windows:**
      1. Run the downloaded .exe file. The installation wizard will start.
      2. Follow the wizard instructions. When prompted, accept the User License Agreement, and if necessary, modify the default installation and workspace directories.
   2. **For Linux:**
      1. Unpack the downloaded archive.
      2. Run `bin/jiraclient.sh` to start Deskzilla.
   3. **For Mac OS X** copy the application from the downloaded image.

1.3 Connection Configuration

To start working with Deskzilla it is necessary to configure a connection to a Bugzilla server. Create a new connection when running Deskzilla for the first time.

1.3.1 Creating New Connection

To create a new connection:

1. Select **New Bugzilla Connection** from the **Connection** menu.
2. In the **New Connection Wizard** specify the Bugzilla URL, user login and password.

   > If anonymous access is selected, the application will work in read-only mode and you will not be able to modify any bugs or create new ones.

3. Click the **Advanced...** button to configure the following parameters if necessary (in most cases there is no need to do this configuration):
   1. E-mail suffix. If your Bugzilla is configured to work with user names instead of e-mails you should specify the e-mail suffix used for your server configuration.
   2. Charset for interacting with Bugzilla over HTTP. This setting is only necessary for Bugzilla versions earlier than 3.0.
   3. Timezone. This setting is used for older versions of Bugzilla to specify the server timezone.
   4. HTTP Proxy
4. After all required parameters are specified, click **Next**.
5. If your login name is not an e-mail address and your Bugzilla is configured to use e-mail suffix, you are prompted to provide your e-mail suffix. If your Bugzilla does not use e-mail suffix, click **Next** to skip this step.
6. Deskzilla will try to connect to your server. If there are connection problems, a notification with a possible reason will be shown (for example, "Invalid Username Or Password").
7. If the connection is configured correctly, you are prompted to select the products you want to work with. Select the products and click **Next**.

   > When adding products select only the necessary ones. This will reduce the local database size and ensure optimized application performance. For more information read the How to Optimize Deskzilla for Working With Many Bugs article.

8. Specify the connection name and finish the connection configuration.

After the connection is configured Deskzilla will automatically download Bugzilla configuration (products, versions, etc) from the selected Bugzilla server.

1.3.2 Viewing, Modifying, and Removing Connections

To see connection settings, select **Show Connection Info** from the **Connection** menu.

To modify connection settings:

1. Select **Edit Connection Settings** from the **Connection** menu or right-click the connection name in the **Navigation Area** and select **Edit Connection Settings**.
2. Go through the same steps as described for a new connection creation.

To remove a connection, select **Remove Connection** from the **Connection** menu or right-click the connection name in the **Navigation Area** and select **Remove Connection**.

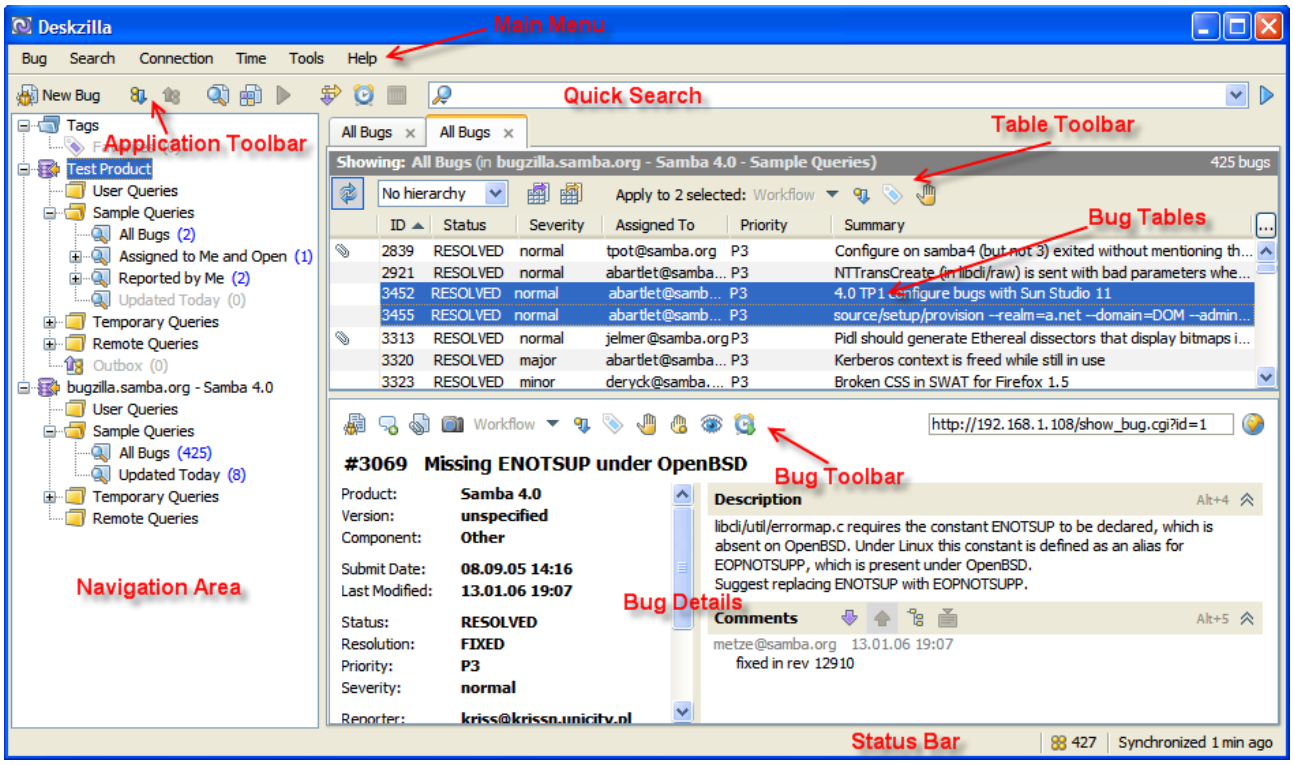
1.4 Deskzilla Upgrade

To upgrade Deskzilla, do the following:

1. Stop Deskzilla if it is running.
2. Backup your workspace .
3. Depending on your operation system do the following:
    1. For Windows:
        1. Run the downloaded installation file.
        2. When prompted for installation directory, select the directory used for previous installation.
    2. For Linux - unpack the downloaded archive over the previous version.
    3. For Mac OS X - copy the application from the downloaded image over the previous version.
4. After launching the new version for the first time, run full synchronization using **File** | **Synchronize** menu.
5. If you're using Bugzilla flags, Deskzilla needs to reload bugs from Bugzilla in order to get information about their flags. Right-click the top-level query that you're using (like "All Open Bugs") and select **Reload Query from Server**.

2 General Overview

Below is a general overview of the Deskzilla main window.



Deskzilla window has the following main elements:

Main Menu	Main menu allows to access most of the application functions including search functions, connection configuration, time tracking, etc.
Application Toolbar	Application toolbar allows to access the most frequently used functions such as adding new bugs, synchronizing a local database, creating and running queries, creating distributions and accessing the time tracker.
Navigation Area	Navigation area allows to create and arrange a hierarchy of queries, distributions, and other elements to organize your work with bugs.
Quick Search	Quick search control allows to run a text search through the bugs of the currently selected query.
Bug Tables	All search results including the results of queries and quick search are displayed in tables. Use tab controls above the tables to switch between tables.
Table Toolbar	Table toolbar is shown when several bugs are selected. It allows to access functions available for the currently selected bugs.

Bug Details	Bug details area shows the detailed information on the currently selected bug.
Bug Toolbar	Bug toolbar allows to access functions available for the currently selected bug.
Status Bar	Status bar shows the number of bugs in the local database and synchronization status.

3 Navigation and Search

Deskzilla allows to search for bugs by creating filters, which you can name, save and work with in the Navigation Area or by running Quick Search or Table Search. Below is the overview of these functions.

3.1 Navigation Area

The navigation area allows you to organize bugs using the following tools:

Queries 	Queries allow you to search for bugs which meet specific complex criteria, create named filters and arrange them in an hierarchy. See the Queries section for details.
Distributions 	Distributions work as sets of filters and are used to break down bugs by some field. For example, a distribution by status will show how many bugs exist for each status in the parent query of the distribution. See the Distributions section for details.
Tabular distributions	Tabular distributions allow breaking down bugs by two fields and set additional filters on the distribution results. See Tabular Distributions section for details.
Folders 	Folder elements are used to group elements in the navigation area.
Tags 	The tags feature allows creating personal tags and attaching them to bugs. You can select a tag in the navigation area and run it as a query to see bugs marked with this tag.
Outbox 	Outbox is a system folder displayed in the navigation area, which contains bugs that were changed, but not uploaded to Bugzilla server.

The same query or distribution can contain different bugs depending on its location in the navigation area. For example, Assigned To Me query will contain all bugs in the product assigned to me when its parent is the All Bugs query. When its parent is the Updated Today query, it will only contain the bugs that are both assigned to me and were updated today.

See the Organizing Queries section for details.

3.2 Search

Apart from searching for bugs with queries you can use Quick Search and Table search:

- Quick Search can be used to search for bugs by words or phrases. In this case the search runs within a currently selected query.

- You can also use Quick Search to search by
  - Bug numbers. In this case the search runs within the currently selected connection.
  - Bug URLs. Based on the specified URL Deskzilla will first find the corresponding connection and then search for the particular bug. If there is no connection that matches the bug URL, Deskzilla will ask you if a new connection with this URL should be created automatically.
- Table Search is used for searching for words or phrases in a selected bug table.

For details see the the Quick Search and Table Search sections.

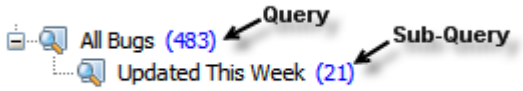
3.3 Queries

Queries allow you to filter bugs by complex criteria, name and save these filters, and then apply them to different elements, such as other queries. Queries are built and modified in the Query Builder and consist of several conditions linked together by the common logic operators: AND, OR, and NOT.

See details in the Query Builder section.

Deskzilla is installed with several default sample queries, which can be removed if necessary.

It is possible to create nested queries, where child query, further referred to as sub-query, filters the search results of its parent query.



To run a query, double-click the query name in the navigation area or select it and click the **Run Query** button on the **Application Toolbar**.

After the query is ran for the first time, the number of bugs that this query contains is shown in blue next to the query All Bugs (425) . Queries, which return empty results are grayed out ASSIGNED (0) .

To create a new query:

1. In the navigation area select the parent element for the query, right-click it, and select **New Query**. Alternatively you can select the parent element and press **F3 (+ F3)**.
2. In the **Create Query** dialog specify the query filter. For details see the Query Builder section.
3. Select the **Run Immediately** check box if you want to run the query right after it is created.

   If the query is running you can stop it by pressing **Esc** or clicking **Stop**.

4. Click **OK** to finish the query creation.

To modify the query:

1. In the navigation area select the required query, right-click it, and select **Edit Query**. Alternatively you can select the parent element and press **Shift + F3 (+ Shift + F3)**.
2. In the **Query Builder** dialog modify the query expression. For details see the Query Builder section.
3. Select the **Run Immediately** check box if you want to run the query right after it is created.

> If the query is running you can stop it by pressing **Esc** or clicking **Stop**.Query Builder

4. Click **OK** to finish the query editing.

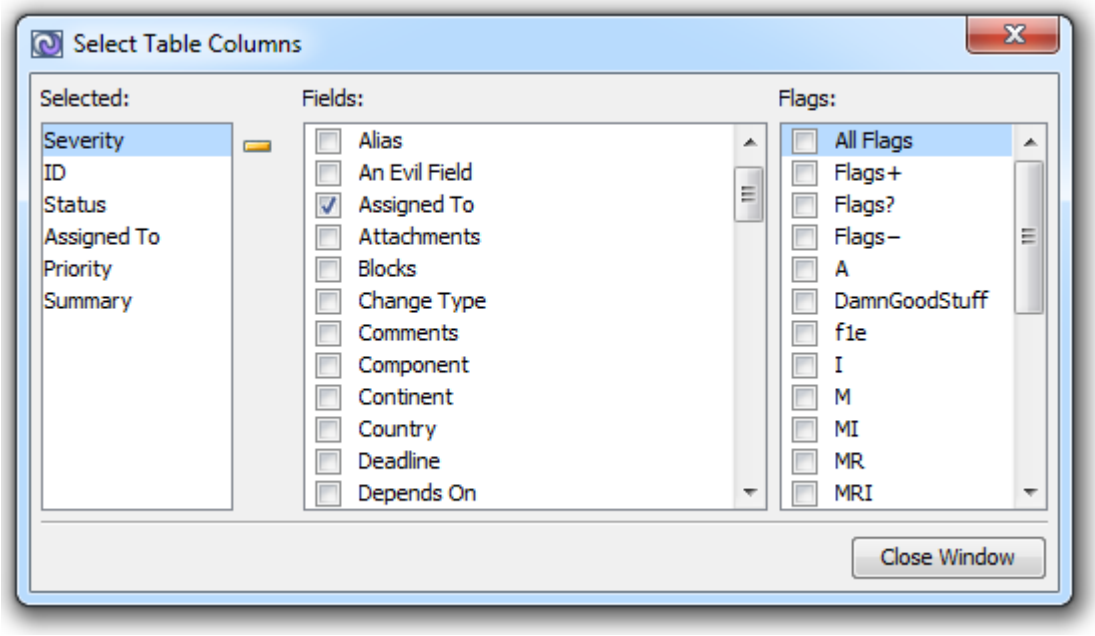
> If you want to change a query that cannot be modified (this can be one of the sample queries or the sub-query of a distribution), you can move it to the **Temporary Queries** folder and modify its copy there. To do so, right-click a query in the **Navigation Area** and select **Create Top-Level Copy**. The query will appear in the **Temporary Queries** folder where you can edit it.
> The query name is automatically changed. All its parent queries are added as a prefix separated from each other with an asterisk (*). For example, "All Bugs*Reported by Me*Open".

3.3.1 Bug Tables

All search results including the results of queries and quick search are displayed in bug tables.

Each table opens in a separate tab so you can switch between tables without re-opening them every time.

You can select which columns should be shown. To do that, click the Select Columns button next to the columns headers  (or press **CTRL +]**) and select the check-boxes next to the Fields and Flags you wish to see in the table.



Once you have added all desired columns you can reorder them in the table using drag-and-drop operation.

You can also sort the table rows clicking on the header of the column you wish to sort by. The table rows are sorted in ascending order first (indicated with "Up" arrow icon in the column header). Clicking the header again will sort the rows in descending order.

Table settings (sorting, selected columns and columns order) are saved individually for each query when the table (or the whole application) is closed.

3.3.2 Query Builder

Query Builder is used to create and modify search filters and is opened whenever you want to create or modify a query.

Filters consist of several conditions linked together by the logic operators: AND, OR (NEITHER), and NOT.

Below is the description of these operators:

AND	To search for the bugs that simultaneously meet two conditions, use the AND operator to connect these two conditions. For example, the filter "Updated Today AND Priority in P1" will return all bugs with priority P1 that were updated today.
OR	To search for bugs that satisfy at least one of two conditions, use the OR operator to connect them. For example, the filter "Updated Today OR Priority in P1 will return all bugs which have priority P1 and also all bugs that were updated today.
NOT	To exclude some bugs from the filter results, use the NOT operator in front of the condition that selects these bugs. For example "NOT Priority in P1" will return all bugs that have priority different than P1.

NEITHER	To search for the bugs that satisfy none of the two conditions use the NEITHER operator. NEITHER works like the combination of NOT and OR. At first the bugs which satisfy at least one if the two conditions are found and then they are excluded from the set of bugs, on which the search is running.

Two conditions connected by the AND or OR operators can be considered as one new condition which you can connect with another condition.

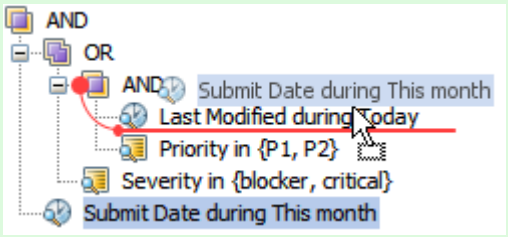
Each condition is represented as certain constraint on the selected field. The types of these constraints are listed in the table below:

Icon	Description
	Search for bugs with specific words in a text field (for example, Comments)
	Search for bugs with a numeric field value within a specified range (for example, Votes).
	Search for bugs with date field value within a specified time range (for example, Submit Date).
	Search for bugs with a single selection field value in the set of selected values (for example, Priority).
	Search for bugs with a multiple selection field value in the set of selected values (for example, Keywords)

To create a filter:

1. Open the Query Builder (Query Builder opens when you create a new query or modify a query).
2. In the **Field** list select the bug field on which you wish to put a constraint. Depending on the selected field type the constraint area will show different controls for specifying constraints.
3. Specify the constraint for the selected field.
4. If you need to add more conditions to your filter, click the logic operator you want to use to connect it to the already specified condition.
5. Select the field on which you want to put a constraint and specify the constraint.
6. To exclude the bugs that satisfy some condition from the search results, select this condition in the **Filter** area and click **NOT**.
7. As you add more conditions they are organized into hierarchy displayed in the **Filter** area. Each operator shows conditions, which it connects as its children.
8. If you wish to add a constraint to a group of conditions already connected with some operator, select this operator and then click one of the operators on the toolbar. Then select the field and specify the constraint.
9. If you select the **OR** operator in the hierarchy and click **NOT**, the operator will be changed to **NEITHER**.
10. Repeat steps 4-8 to add more conditions to the filter.

Once you have added conditions to the filter you can modify the filter by dragging the conditions within the **Filter** area in the **Query Builder**.

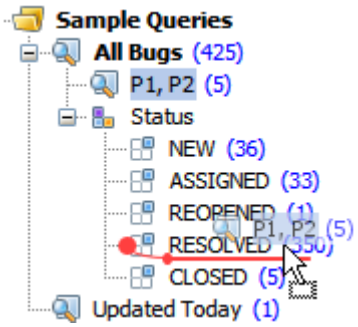


3.3.3 Organizing Queries

All queries and distributions work as filters. This means that the sets of bugs they contain may change depending on which element is the parent of the query.

Deskzilla allows to move and copy queries to different locations in the navigation area filtering bugs contained in the query parent elements.

To move a query or a distribution, select it in the navigation area by clicking it and then drag it to the required location. As the element is dragged over the navigation area, the possible new locations are highlighted with red. Once the required location is highlighted drop the element.



To copy a query or a distribution, right-click on it and select **Copy**. Then right-click the element, that should be the parent of your query copy and select **Paste**.

3.3.4 Sharing Queries

You can exchange queries with other Deskzilla users through e-mail or an instant messenger.
To share a query:

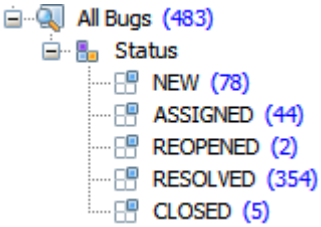
1. Select a query or a query folder and press **Ctrl + C** (**+ C**) or right-click it and select **Copy**.
2. Paste it into a message you are going to send. The query will be pasted as an XML-formatted text.

To use a shared query:

1. Select an XML text of the query and copy it into Clipboard.
2. Open Deskzilla, select a query which should be a parent for your query and press **Ctrl + V** (**+ V**) or right-click it and select **Paste**. A new query will appear in the **Navigation Area**.

3.4 Distributions

Distributions work as sets of filters and are used to break down bugs by single or multiple selection fields. For example, a distribution by status will show how many bugs exist for each status in the parent query of the distribution.



The sub-queries in a distribution are automatically created based on the possible values of the field for which the distribution is created. They are named after these values and cannot be modified or removed.

To add a new distribution:

1. Select the parent element and click **Search | Create Distribution** (or press **CTRL + D**) or right-click the parent element and select **Create Distribution**.
2. In the dialog select a field for distribution and click **OK** to add the distribution.
3. If you want to set additional filtering or grouping, click the **Filter or group values >>** button and specify the filters and grouping rules. See the Distribution Grouping and Filtering section for details.

> By default the sub-queries that contain no bugs are hidden. To show them, right-click the distribution name and select **Empty Sub-Queries | Show**. To hide empty sub-queries, right-click the distribution name and select **Empty Sub-Queries | Hide**.

> You can remove an unneeded value from the distribution. Right-click the sub-query you want to remove and select **Exclude from Distribution**. This will create a filter, which you can remove or modify later through the **Edit Distribution** dialog.

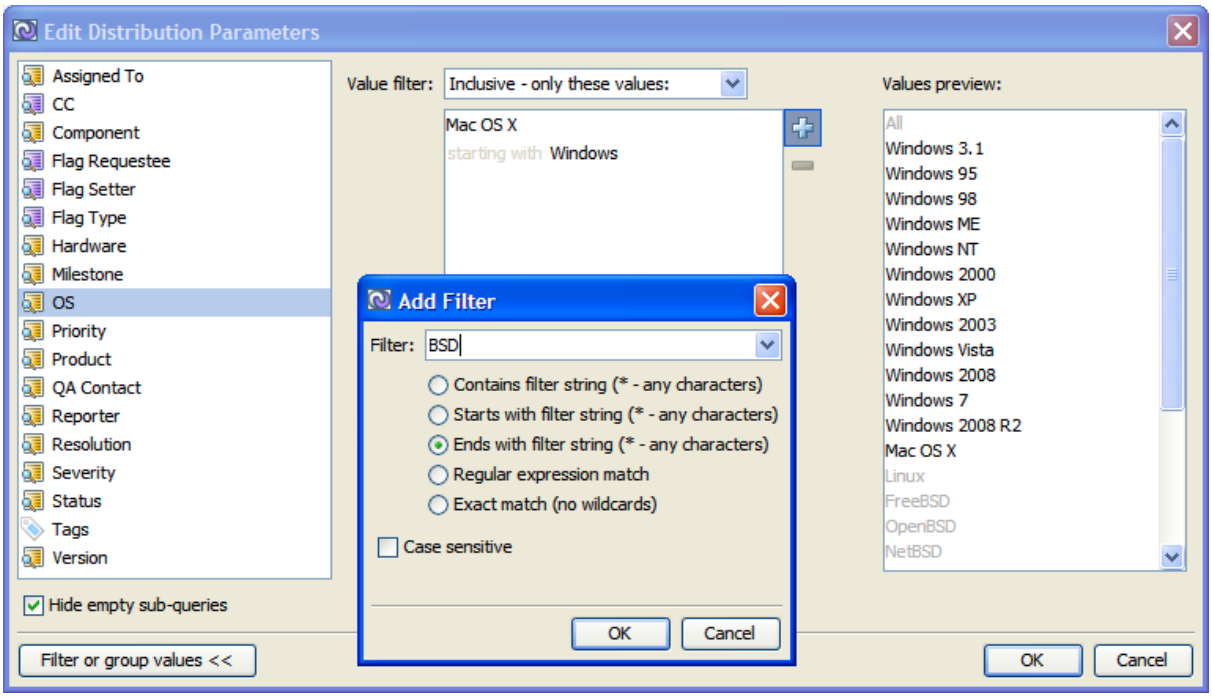
To edit a distribution, select it in the navigation area and select **Search | Edit Distribution** or press **CTRL + D**. Alternatively you can right-click the distribution and select **Edit Distribution**.

3.4.1 Distribution Grouping and Filtering

When creating a distribution you can set additional filters on the distribution to refine the search results. For some distributions you can also add grouping by some parameter. This will add another sub-level to the distribution (i.e. results will be grouped by some parameters. For example, distribution by bug reporter can have a grouping sub-level - reporter's e-mail domain).

To add a filter to distribution results:

1. Open the **Create New/Edit Distribution** dialog.
2. Select the field for distribution.
3. Click the **Filter or group values >>** button.
4. The area on the right will show controls for grouping and filtering.
5. Select the filter type. Select **Inclusive** if you want to specify values, which should be included in the search results or **Exclusive** to specify values to be excluded from the search results.
6. Drag the values from the **Values preview** list on the right to the list under the **Filter** combo box to add them to the filter.
7. If you want to add many items which all meet some criteria instead of dragging them you can specify a filter that selects them. To do that, click the **Plus** button next to the filter list, select one of the filter types in the **Add Filter** dialog, specify the filter value and click **OK**.



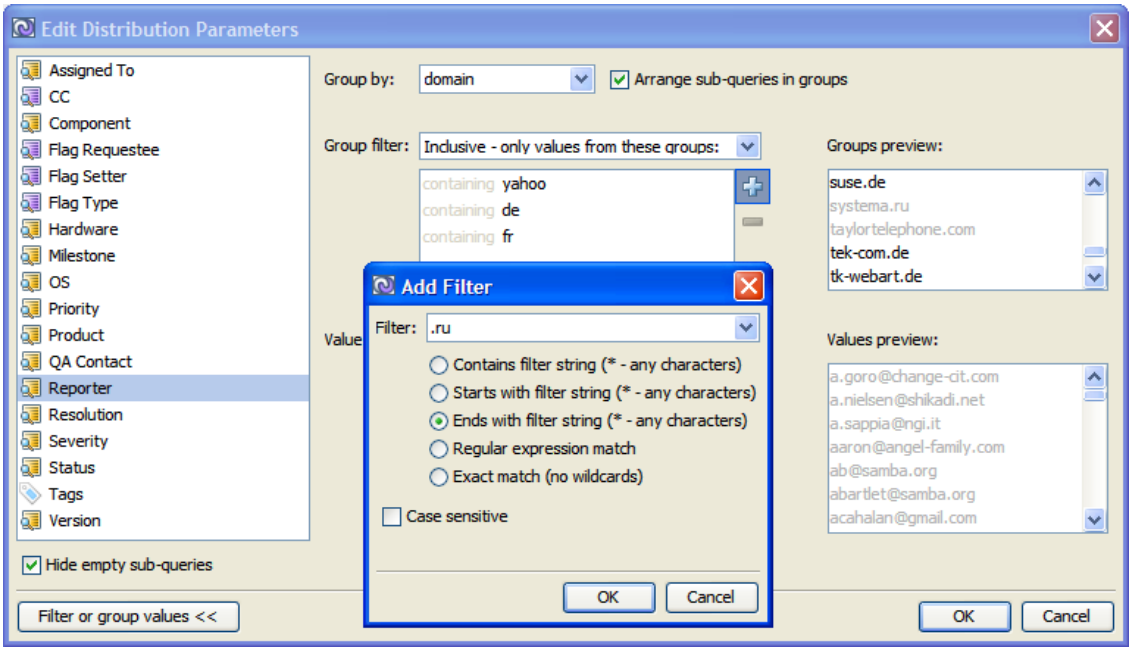
The values dragged to the filter list and the values selected by the filter are highlighted in the values list so you can see if the filter you specified actually selected required values.

8. Click **OK** to save the distribution and see its results.

To add grouping:

1. Open the **Create New/Edit Distribution** dialog.

2. Select the field for distribution.
3. Click the **Filter or group values >>** button.
4. The area on the right will show controls for grouping and filtering.
5. Select the parameter for values grouping.
6. Select the **Arrange sub-queries in groups** check box if you want to see the grouping sub-level in the navigation area. If the check box is not selected the grouping and grouping filter will be applied to the search results, but no sub-level will be displayed.
7. If necessary, add filters to be applied to grouping:
    1. Select the filter type. Select **Inclusive** if you want to specify values, which should be included in the search results or **Exclusive** to specify values to be excluded from the search results.
    2. Drag the values from the **Groups preview** list on the right to the list under the **Group filter** combo-box to add them to the filter.
    3. If the values list contains many items instead of dragging them you can specify a filter that selects them. To do that, click the plus button next to the **Group filter** list, select one of the filter types in the **Add Filter** dialog, specify the filter value and click **OK**.



> The values dragged to the filter list and the values selected by the filter are highlighted in the values list so you can see if the filter you specified actually selected required values.

8. Click **OK** to save the distribution and see its results.

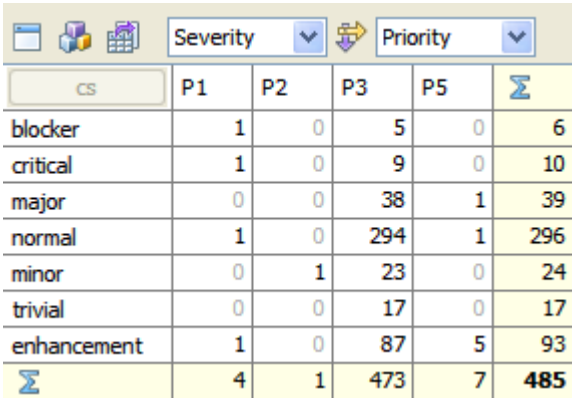
> Distributions with filters are marked with "(filtering)" label in the navigation area. Thus user is reminded that the distribution filters the bugs and not all bugs of the parent element are present in the results.

3.4.2 Tabular Distribution

Tabular distribution allows to create a two-dimensional bugs breakdown by two fields and apply it to any existing query.

To access and customize a tabular distribution view:

1. Click the **Tabular Distribution** button on the **Application Toolbar**.
2. The tabular distribution view for the currently selected query is shown below the navigation area. As you select other queries in the navigation area the distribution view contents changes filtering the bugs in the selected query.



cs	P1	P2	P3	P5	Σ
blocker	1	0	5	0	6
critical	1	0	9	0	10
major	0	0	38	1	39
normal	1	0	294	1	296
minor	0	1	23	0	24
trivial	0	0	17	0	17
enhancement	1	0	87	5	93
Σ	4	1	473	7	**485**

3. From the drop-down lists select the fields for the distribution.
4. The table will show how bugs from the currently selected element in the navigation area are distributed by two selected fields.

> Click the number in the table cell to see the bugs this number reflects.

5. You can swap the table rows and columns clicking the **Swap** button located between the fields drop-down lists.
6. It's possible to sort table by clicking on columns and row headers. Click the **cs** button to clear sorting.
7. You can add counters to the distribution, which will show how many bugs from the cell meet additional criteria. To do that:
    1. Click the **Configure summary table** button on the tabular distribution toolbar.
    2. In the **Counters Configuration** dialog the left list displays the existing filters. The **All** filter is created by default. To add more filters click the **Add Counter** button .
    3. The **Edit Filter** dialog is displayed. Use it to create a filter. See the Query Builder section for details on building filters.
8. Once the counters are added they are all displayed in the table cells in the same order as they were arranged in the **Counters Configuration** dialog.

You cannot save tabular distributions, however, you can open several different distributions at once (both for different queries and with different filters). To do that, click the **Open Copy In the Window** button on the tabular distribution toolbar. The table will be shown in a separate window where you can modify the distribution filters, while the query for which the distribution is shown will stay unchanged. After that you can select another query for distribution in the navigation area, modify the distribution and open it in another window.

You can also export distribution tables to CSV files to open and work with them later in Excel. To do that, click the **Export to CSV** button on the tabular distribution toolbar.

3.5 Quick Search

Quick Search located at the top of the Deskzilla **Main Window** allows you to search for bugs by several parameters:

- Search by words or phrases
- Search by bug IDs
- Search by bug URLs

For search by words and by IDs you can specify the scope where the search should be run. See the Defining Scopes section for details.

To search by words or phrases:

1. Select the query where you want to run the search or select a more complex search scope. See the Defining Scopes section for details.
2. Click the Quick Search input field (or press **CTRL + F**). The selected search scope will be highlighted in the navigation area.
3. Specify the words you are looking for and press **Enter** or click the **Run text search** button located next to the input field.
4. Deskzilla will search for the bugs containing specified words.

> Input words can be separated with spaces, commas or semicolons. Several words in double quotation marks are treated as one word. When searching for text, Deskzilla looks into text fields and comments. So, searching for "RESOLVED" will NOT show all resolved bugs, only bugs with the word "resolved" in Summary, Description, comment or any text field. The search is not case sensitive.

5. The results are shown in the bugs table.

To search by IDs:

1. Select the query where you want to run the search or select a more complex search scope. See the Defining Scopes section for details.

2. Click the **Quick Search** input field (or press **CTRL + F**). The selected search scope will be highlighted in the navigation area.
3. Specify the IDs of the bugs you want to find separated by spaces, commas, or semicolons and press **Enter** or click the **Run text search** button  located next to the input field.
4. Deskzilla will search for the bugs with the specified numbers in the selected scope.
5. The results are shown in the bugs table.

To search by URLs:

1. Click the **Quick Search** input field (or press **CTRL + F**) and specify the bugs URLs separated by spaces, commas or semicolons.
2. Press **Enter** or click the **Run text search** button  located next to the input field.
3. Deskzilla will analyze the bugs URLs and then will search in the connections corresponding to bugs servers.
4. If there are no corresponding connections for some of the URLs, Deskzilla will ask you if these connections should be created automatically with default settings.
5. The results are shown in the bugs table.

Search by URL provides a convenient way to share the sets of bugs with other users. You can select the required bugs in the table, copy them (press **CTRL + C**) and paste to the instant messenger or e-mail. Bugs will be pasted as their URLs. Another user can copy them from the message and paste to the quick search field. Running the search will display the initial set of bugs.

3.5.1 Defining Scopes

You can either use one of the two existing default scopes: **Search within selected nodes** and **Search everywhere**, or specify your own scope.

To select the scope:

1. Click the magnifying glass icon next to the search input field
2. Select the required scope. If **Search everywhere** is selected, Deskzilla will search for bugs in all existing connections. For **Search within selected nodes** the search will be ran withing the elements currently selected in the navigation area.

To add a personalized scope:

1. Select the required scope in the navigation area.
2. Click the magnifying glass icon.
3. Click **Add scope...**. If necessary, modify the scope name and click **OK**.

3.6 Table Search

After you found a set of bugs you can further search for specific words of phrases in this set using the **Table Search**.

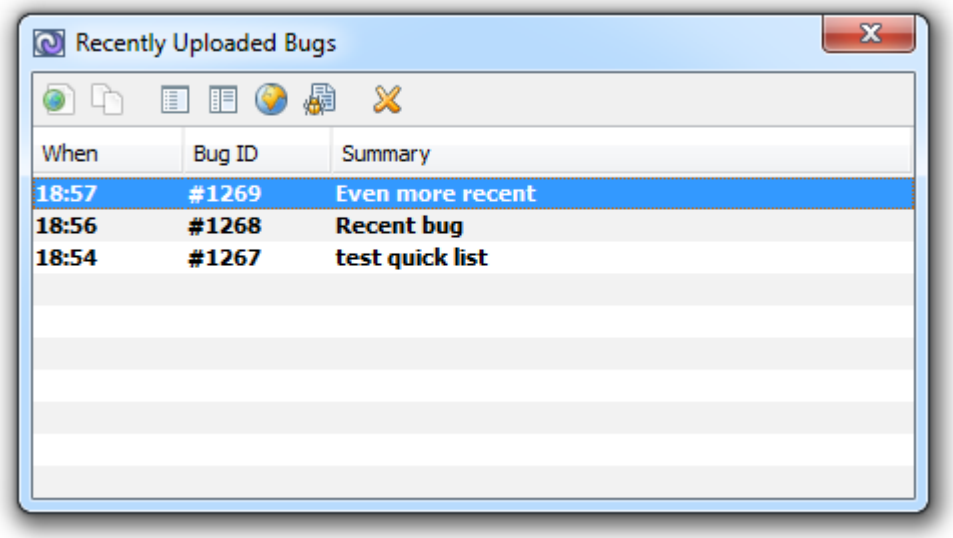
To search for words or phrases in a table:

1. Select the table using the tab control.
2. Press **CTRL + SHIFT + F** or select **Search | Find in Table**.
3. In the table search control which opens specify text to search for.

4. Select the required check boxes:
    1. Case Sensitive. Select this check box to run a case sensitive search.
    2. Regexp. This is an advanced-user feature which allows to use Perl-compatible regular expressions for the search. You can find more information on regular expressions here (http://java.sun.com/javase/6/docs/api/java/util/regex/Pattern.html) .
    3. Filter. When selected, the table will only show the bugs which contain the specified text value.
5. Press **Enter** to see search results. The found text is highlighted with the green color.
6. Use the **Next** and **Previous** arrow buttons to navigate between the found results,

3.7 Recent Bugs List

You can view the list of the recently created and modified bugs by selecting **Show Recent Bugs** from the **Connection** menu (or pressing **CTRL + /**).



The recently added bugs are highlighted with bold. The modified bugs are shown with no highlighting.

The buttons on the toolbar allow you to:

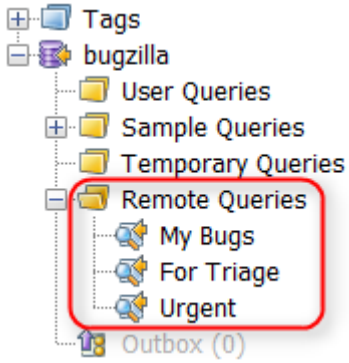
- Copy the bug ID and summary to the clipboard
- View the bug in a separate window or in a new tab
- Open the bug in browser
- Open the bug for editing

Hover over the buttons in the toolbar to see the tooltips explaining buttons actions.

The bugs are added to the list until it gets full (20 bugs). After that the older bugs are pushed out by the more recent bugs.

3.8 Remote Queries

Remote Queries folder in the Navigation Area shows the Saved Searches visible to your user account in Bugzilla.



If you've created a new Saved Search in Bugzilla and want Deskzilla to show it immediately, right-click the connection to this Bugzilla server and select Reload Bugzilla Configuration (or select this connection and press Ctrl+F5).

If you do not reload Bugzilla configuration manually, new saved searches will be loaded automatically during the daily configuration reload.

The main difference from the ordinary queries is that the only way to get the bugs returned by this query is actually running the query. This means that even though the query is ran automatically on a regular basis to get the updates, for some time the query results saved in the local database may not reflect the latest changes. In order to see the latest query results, close the query results bug table tab and run the query again.

Another limitation of Remote Queries is that you cannot create sub-queries under these queries.

Both limitations exist because there is no way for Deskzilla to obtain the Saved Searches criteria.

4 Working With Bugs

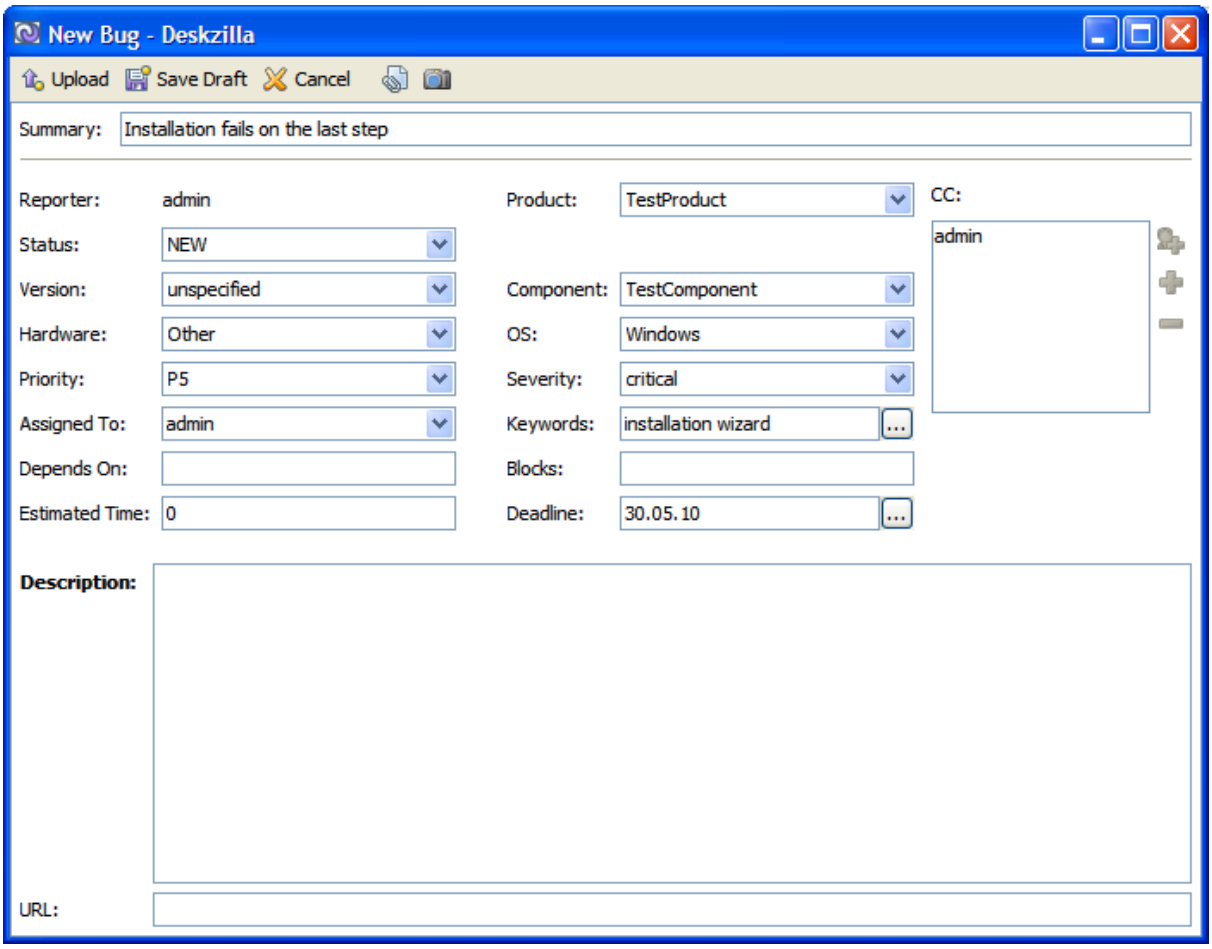
This section explains how to create and modify bugs, change bug status, specify bug details, etc. Please, refer to the subsections for the required information.

4.1 Creating New Bugs

To create a new bug:

1. Select the connection where you want to create a bug.
2. Click the **New Bug** button on the application toolbar or select **Bug | New Bug** (press **CTRL +N**). The **New Bug** dialog is shown.
3. Specify the bug summary, description and other parameters.
4. Click the **Attach File** or **Attach Screenshot** buttons to add attachments or screenshots. See the Working With Attachments (see page 23) and Working With Screenshots (see page 24) sections for details.

5. Click the **Upload** button if you want to add this bug to Bugzilla server immediately or click the **Save Draft** button to save the bug locally.



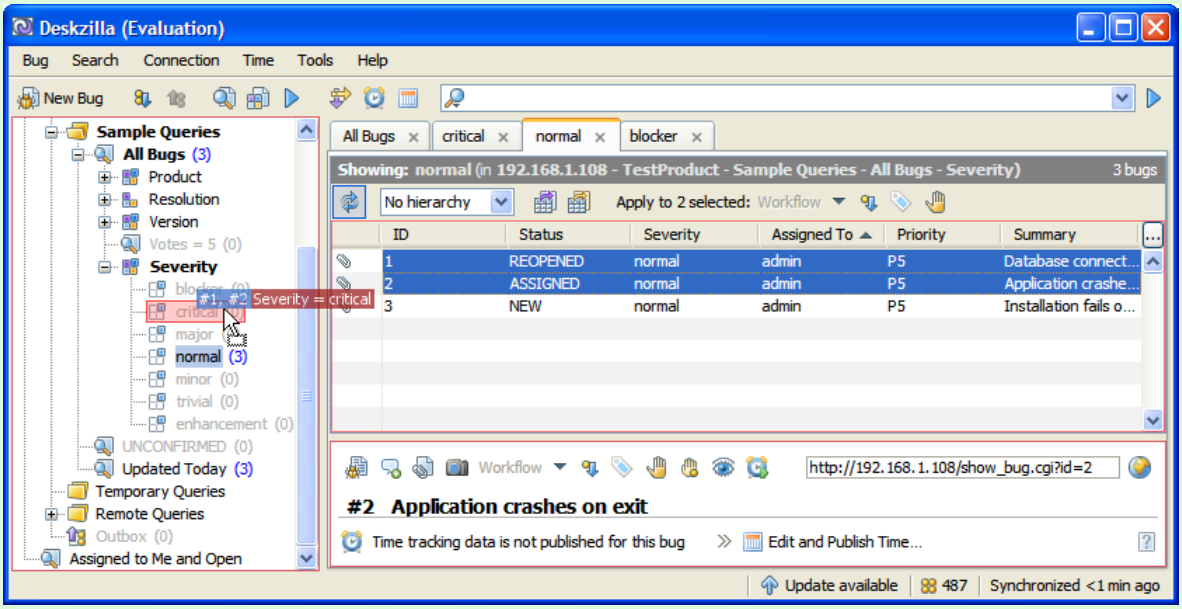
A newly created bug has no ID and URL until it's uploaded to the server.

4.2 Modifying Bugs Attributes

You can modify a bug using the **Edit Bug** dialog. To edit a bug:

1. Select the bug in the table and click the **Edit Bug** button on the Bug Toolbar (press **F4**) or right-click the bug and select **Edit Bug**,
2. In the **Edit Bug** dialog modify the bug summary, description or any other parameters.
3. Click the **Attach File** or **Attach Screenshot** buttons to add attachments or screenshots. See the Working With Attachments (see page 23) and Working With Screenshots (see page 24) sections for details.
4. Click the **Upload** button if you want to upload changes to Bugzilla server immediately or click the **Save Draft** button to save them locally.

Another way to modify bugs is to use **drag-and-drop** function in the navigation area. For example, you have a distribution by Severity and you want to change the Severity value for a number of bugs. Instead of opening each bug for edit, you can select the desired bugs in the bug table and drag them to the required Severity sub-query in the distribution. The Severity value for selected bugs will be changed.



Some attributes can be changed from the **Bug Toolbar**:

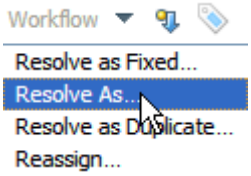
- **CC List**. Can be edited from the **Edit Bug** dialog or in a separate dialog which can be accessed by clicking the **Edit CC List** button on the **Bug Toolbar**.
- **Vote**. Click the **Vote** button on the **Bug Toolbar** to vote for the bug. The vote icon will be displayed next to the bug in the **Bug Table**. To vote for several bugs at the same time, select the bugs and click the **Vote** button which appears in the **Table Toolbar**.
- **Advanced Voting**. To use the advanced voting (allows you to add more than one vote and view other users votes) click the **Advanced Voting** button on the **Bug Toolbar** and add your votes in the dialog.

4.3 Modifying Bugs Status

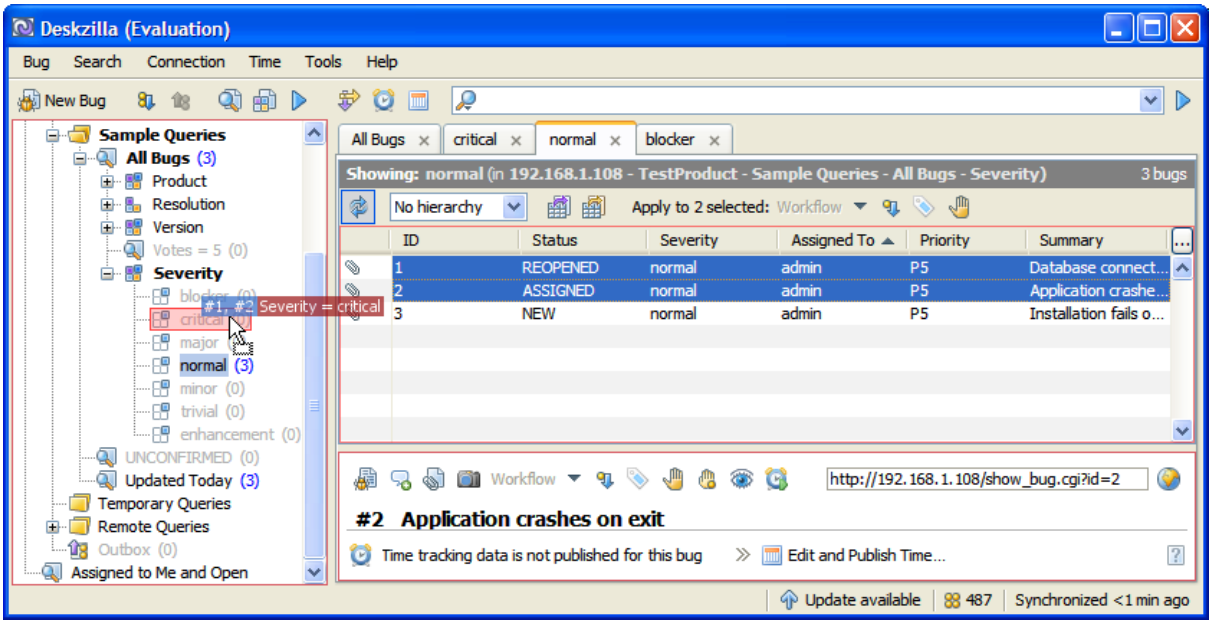
There are several ways to modify bugs status:

- Open the bug for editing and in the **Edit Bug** dialog select the desired status from the **Status** drop-down list and, if necessary, select the resolution from the **Resolution** drop-down list.

- Select the bug in the **Bug Table** and select one of the values from the **Workflow** drop-down list on the **Bug Toolbar**.



- Use **Status** and **Resolution** distributions to change bug status or resolution. Select the bugs in the **Bug Table** and drag them to the required sub-query.



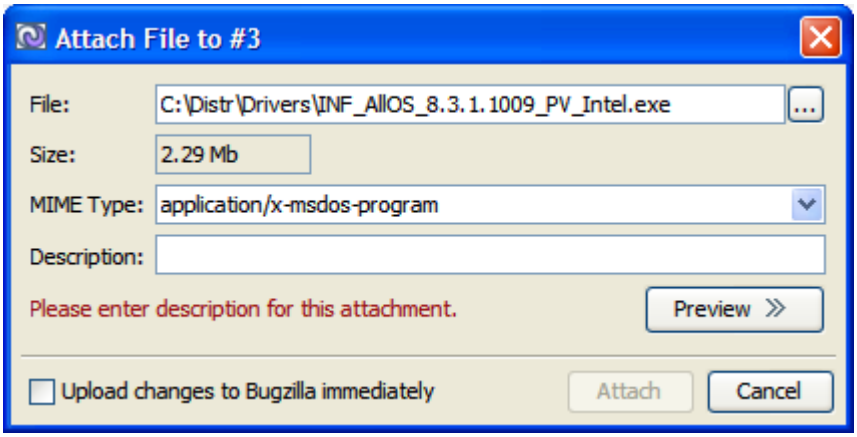
> Be careful when changing bugs status this way. Some operations are not allowed by the workflow rules. For example, you are not allowed to change the status from **Resolved** to **New**. You can do it using the drag-and-drop function, but only locally. Once you try to upload this change to Bugzilla, an error will be detected and you will be prompted to resolve the problem.

4.4 Attachments

To attach a file:

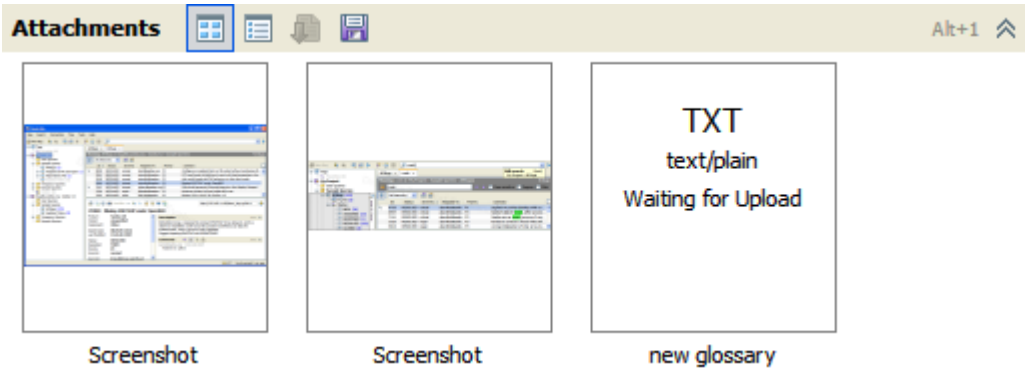
1. Right-click the bug and select **Attach File** or select the bug and click the **Attach File** button on the **Bug Toolbar** or press **CTRL + Alt + F**.
2. In the **Select File** dialog select the file to attach and click **OK**.
3. Alternatively, instead of steps 1 and 2, you can locate the file you wish to attach on your disk and drag it to the bug details area or to the bug itself in the bug table.

4. In the **Attach File** dialog provide the file description.



5. The file MIME type is automatically detected by the file extension. If is was detected incorrectly, modify it using the **MIME Type** drop-down combo box. MIME type is required for the correct display of the file preview.
6. For some file types (image, including png, gif, jpeg, bmp, and text, including xml and html) the preview is available. Use the **Preview >>** button to access it. If the built-in preview is not available, you can select a program to open the file with.
7. Select the **Upload Changes Immediately** check box if you wish to upload attachment to Bugzilla immediately. Remove the selection to save it locally.
8. Click **Attach**.

After attachments are added they can be viewed in the **Bug Details** area.



The **Attachments Toolbar** provides the following functions:

- The **View Thumbnails** and **View Details** buttons allow to switch between two viewing modes. The first one shows the attachments and screenshots as thumbnails, the second shows the table with attachments and screenshots details such as Description, File Name, Date, etc.
- The **Download** button allows to download the attachment or screenshot from Bugzilla if it is not downloaded yet.
- The **Save A Copy** button allows to save a copy of the attachment to your disk.

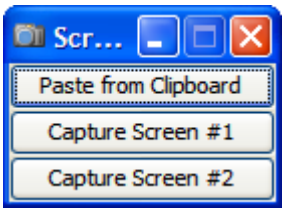
4.5 Screenshots

4.5.1 Adding Screenshots

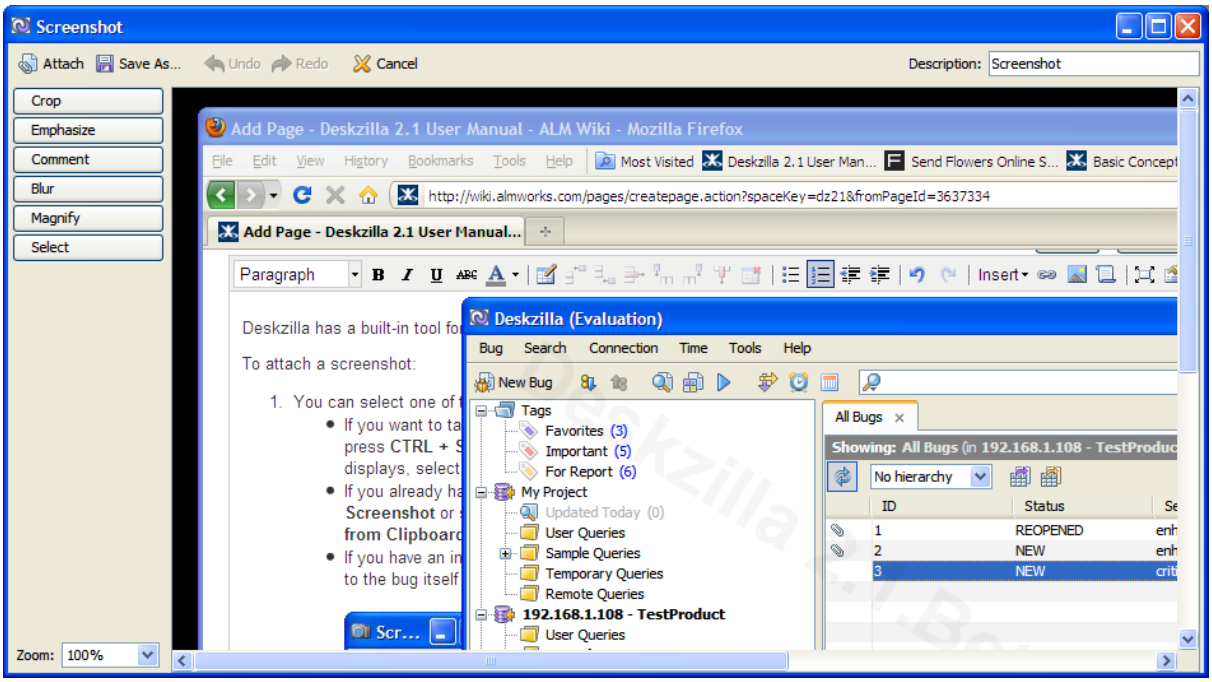
Deskzilla has a built-in tool for making screenshots. There are several ways to add a screenshot:

To add a screenshot:

1. You can select one of the options:
    - If you want to take a screenshot first, right-click the bug and select **Attach Screenshot** or select the bug and click the **Attach Screenshot** button on the Bug Toolbar (press **CTRL + S**). In the **Screenshot Source Selection** dialog select **Capture Screen**. If you have several displays, select the one you wish to use for the screenshot.
    - If you already have an image for the screenshot in the Clipboard, right-click the bug and select **Attach Screenshot** or select the bug and click the **Attach Screenshot** button on the Bug Toolbar (press **CTRL + S**). In the **Screenshot Source Selection** dialog select **Paste from Clipboard**.



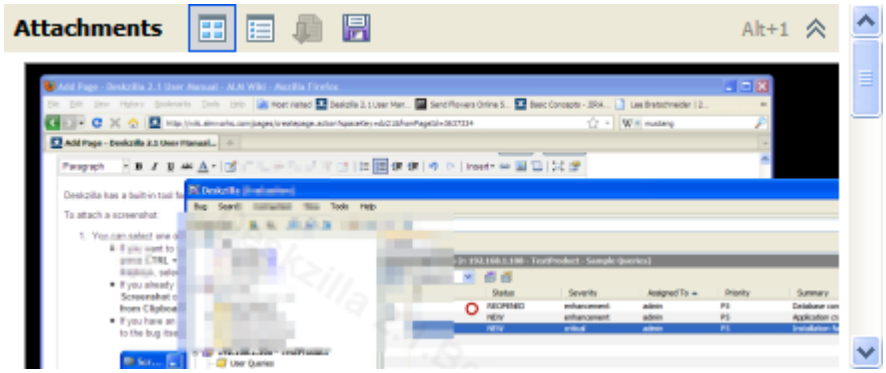
    - If you have an image saved on your disk and you want to add it as a screenshot, drag it to the bug details area or to the bug itself in the **Bug Table**.
2. After any of the actions above the image/screenshot will be open in the Screenshot editor.



3. Modify the image using the editing tools:
    - **Crop**. Crops the image to the selected area.
    - **Emphasize**. Adds a colored box to attract attention to particular area.
    - **Comment**. Adds either a colored box with a comment box attached, or just a comment box.
    - **Blur**. Allows to hide sensitive information by blurring the selected area. Blur intensity is adjustable.
    - **Magnify**. Allows to add a box showing the selected area with magnification. Magnification level can be adjusted.
    - **Select**. Allows to select and modify the objects described above after they are added to the image.
4. Click the **Save As** button to save the results as a png or jpg file.
5. Click the **Attach** button to attach the screenshot to the bug.

4.5.2 Viewing Screenshots

After the screenshot is added it is displayed in the **Bug Details** area.



The **Attachments Toolbar** provides the following functions:

- The **View Thumbnails** and **View Details** buttons allow to switch between two viewing modes. The first one shows the screenshots as thumbnails, the second shows the table with screenshots details such as Description, File Name, Date, etc.
- The **Download** button allows to download the screenshot from Bugzilla if it is not downloaded yet.
- The **Save A Copy** button allows to save a copy of the screenshot to your disk.

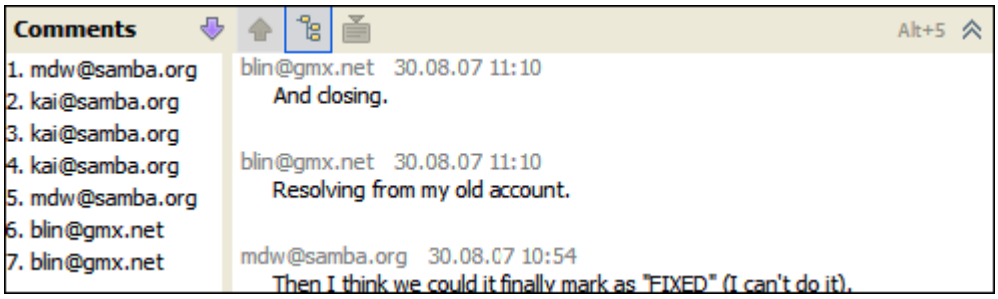
4.6 Comments

There are several ways to add a comment:

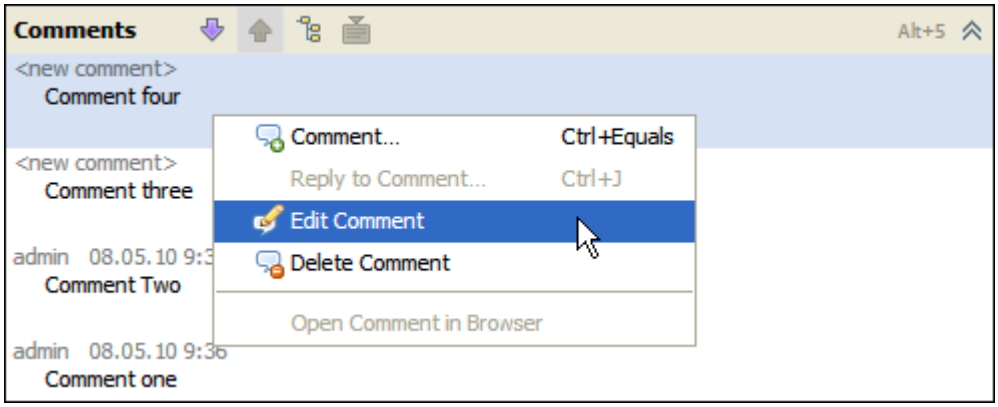
- Select the bug in the **Bug Table** and click the **Comment** button on the **Bug Toolbar**. Provide your comment in a dialog. Click **Upload** to upload it to Bugzilla immediately or **Save Draft** to save it locally.
- Select the bug in the **Bug Table** and open the **Edit Bug** dialog. Provide your comment in the **Additional Comment** field. Click **Upload** to upload it to Bugzilla immediately or **Save Draft** to save it locally.

- Right-click one of the comments in the **Bug Details** area and select **Comment**. Provide your comment in a dialog. Click **Upload** to upload it to Bugzilla immediately or **Save Draft** to save it locally.

The comments are displayed in the **Bug Details** area. The **Comments Toolbar** provides additional functionality for working with comments.



The comments which are saved locally have the <new comment> tag instead of the comment author label and can be modified or removed. To do that, right-click the comment and select **Edit Comment** or **Delete Comment**.



Once a comment is uploaded to Bugzilla the <new comment> tag is changed to the comment author label and the comment cannot be modified anymore. Instead, the **Reply to Comment** option becomes available. Right-click the comment to select this option.

The **Comments Toolbar** provides the following functions:

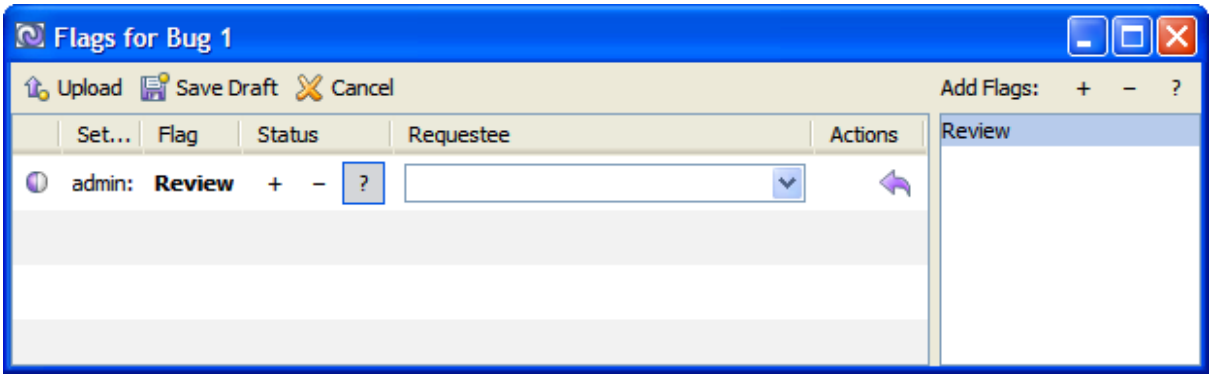
- Arrange comments by creation date. Use the **Oldest First** and **Newest First** buttons.
- View comments in a thread. Click the **Threaded Comments View** button to see the thread structure.
- Expand all comments. For the first ten comments the full text is shown. For other comments you can see only a fixed number of symbols and you need to click the comment to see full text. To expand all comments at once, use the **Expand All Comments** button .

4.7 Flags

If there are flags defined on the Bugzilla server Deskzilla will download their settings with the rest of the configuration when a new connection is added and will display controls for working with flags. However, if you added flags on the server after the connection was added, you need to reload the configuration (press **CTRL + F5** or select **Connection | Reload Bugzilla Configuration**).

To edit flags for a bug:

1. Open the **Edit Flags** dialog by either selecting the bug in the Bugs Table and clicking the **Edit Flags** button on the Bug Toolbar or right-clicking the bug and selecting **Edit Flags**.



2. If you want to add a new bug, in the **Add Flags** column on the right select the flag you wish to add and click the flag status (**+**, **-**, or **?**). The newly added flag will be shown in the table.
3. To change the flag status, click the desired status symbol (**+**, **-**, or **?**) in the Status column.
4. To modify the requestee, select the required value from the combo box in the **Requestee** column.
5. To remove a flag click the **Remove** button in the Actions column.
6. Click the **Upload** button to save changes locally and upload them to server or the **Save Draft** button to save them only locally.

5 Synchronization

Deskzilla always works with the local database. This section describes, how this database is synchronized with Bugzilla.

5.1 Local Database Synchronization

To support the offline work and reduce the volume of downloads from the server, Deskzilla works with the local database. All the information available in Deskzilla is taken from it.

To ensure the information in the local database is always up-to-date and has all the recent changes made in Bugzilla, Deskzilla regularly sends a request to the server to get the change log and if necessary downloads all the recent changes. By default this synchronization runs every 150 seconds (if there is a server connection).

Synchronization runs in the background and since the updates are done regularly, the amount of downloaded information is usually small and does not affect application performance. You can also run synchronization manually by clicking the **Get Changes Now** button on the application toolbar or pressing **F5**.

You can switch off the background synchronization for individual connections. This is especially useful for connections you do not currently use or do not use very often. You can switch off background synchronization and synchronize your bugs manually when necessary. This can save you some substantial time and internet traffic. To switch on/off the background synchronization right-click the desired connection and select On or Off option from the **Get changes in Background** menu.

When adding a new connection select only the products you are going to work with. This will reduce the local database size and time required for its update.

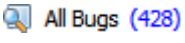
5.1.1

5.1.2 Loading Configuration

When a new connection is added Deskzilla downloads its configuration (version, workflow, products, components, etc). Every 12 hours Deskzilla reloads configuration from the server to get the latest updates.

You may need to reload configuration manually. For example, you know that the configuration was changed and you need to work with those changes (for example, a new version of the product was added). To reload Bugzilla configuration, select the connection to update and select **Reload Configuration** from the **Connection** menu or press **CTRL + F5**. This will download both configuration updates and bug changes.

5.1.3 Queries Synchronization

When a new connections is created all its queries are unsynchronized. When a query is ran for the first time Deskzilla runs it on the Bugzilla server and retrieves all the bugs the query contains from the server. After this is done a blue label next to the query shows the number of bugs it contains 

. Naturally, all sub-queries of the synchronized query are also synchronized.

It is recommended to run the **All Bugs** query when a new connection is added (if there are not more than 10,000 bugs in Bugzilla). It will take some time, but since it is the root query and contains all the bugs, once the process is finished all other queries will be synchronized as well and from that moment you will work with the local database only, which Deskzilla will keep continuously up-to-date.

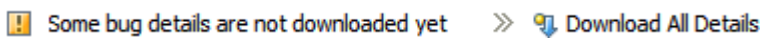
If at some point Deskzilla detects that the query may not be up-to-date, the blue label with the number of bugs is removed. If you run the query in this situation Deskzilla will first show the bugs based on the local data and run the update process in the background.

If a connection is modified all its bugs and queries should be synchronized again, because the change of the user, for example, may affect the query results.

You can also view the query results in the browser. To do that, right-click the query and select **Open Query in a Browser**. Please note, that for technical reasons this function may return more bugs in the browser than there are in the query.

5.1.4 Bug Details Download

When running an unsynchronized query for the first time Deskzilla downloads most of the bug details, however some of them are downloaded later, when you open a bug details. This is reflected in the bug info bar at the bottom of the bug details are.



To download all details for a set of bugs, select these bugs in the bug table, right-click them and select **Download All Details** or press **SHIFT + F5**.

If bug details were downloaded before, but you want to make sure the bugs you are viewing have all the latest updates, select and right-click them and select **Reload All Details** or press **SHIFT + F5**.

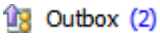
5.2 Uploading Changes To Server

To support the offline work and make work with the server more efficient, Deskzilla works with the local database. This means that all changes made to bugs can be either saved locally only or both saved locally and uploaded to Bugzilla.

Most Deskzilla dialogs used for changing bugs provide two buttons - Save Draft 

(save changes locally) and Upload 

(upload changes to Bugzilla) or have the check box which allows to select if the changes should be uploaded to the server immediately.

All bugs which have local changes not uploaded to Bugzilla are marked with the special icon in the bug table and can be found in the special **Outbox** folder in the navigation area 

. Another way to see modified bugs is to click the icon and the number of modified bugs shown in the status bar at the bottom of the window 

.

Apart from these icons attached to the bugs, the modified bugs are treated by Deskzilla exactly the same as other bugs. New bugs have one more difference - they have no ID and URL assigned to them, until they are uploaded to Bugzilla.

For modified bugs you can discard all changes which were saved only locally and not uploaded to Bugzilla. For a new bug this operation will remove the bug, since it does not exist in Bugzilla. To discard changes, select the bugs in the bug table, right-click them and select **Discard Changes**.

Once you are ready to upload changes to Bugzilla you can click the **Upload** button on the application toolbar (press **F6**) to upload changes for all bugs at once or select the bugs you want to upload changes for in the bugs table, right-click them and select **Upload** (press **SHIFT + F6**).

You can also access the discard and upload functions from the bugs status bar at the bottom of the bug details area.

5.2.1

5.3 Conflicts And Merge

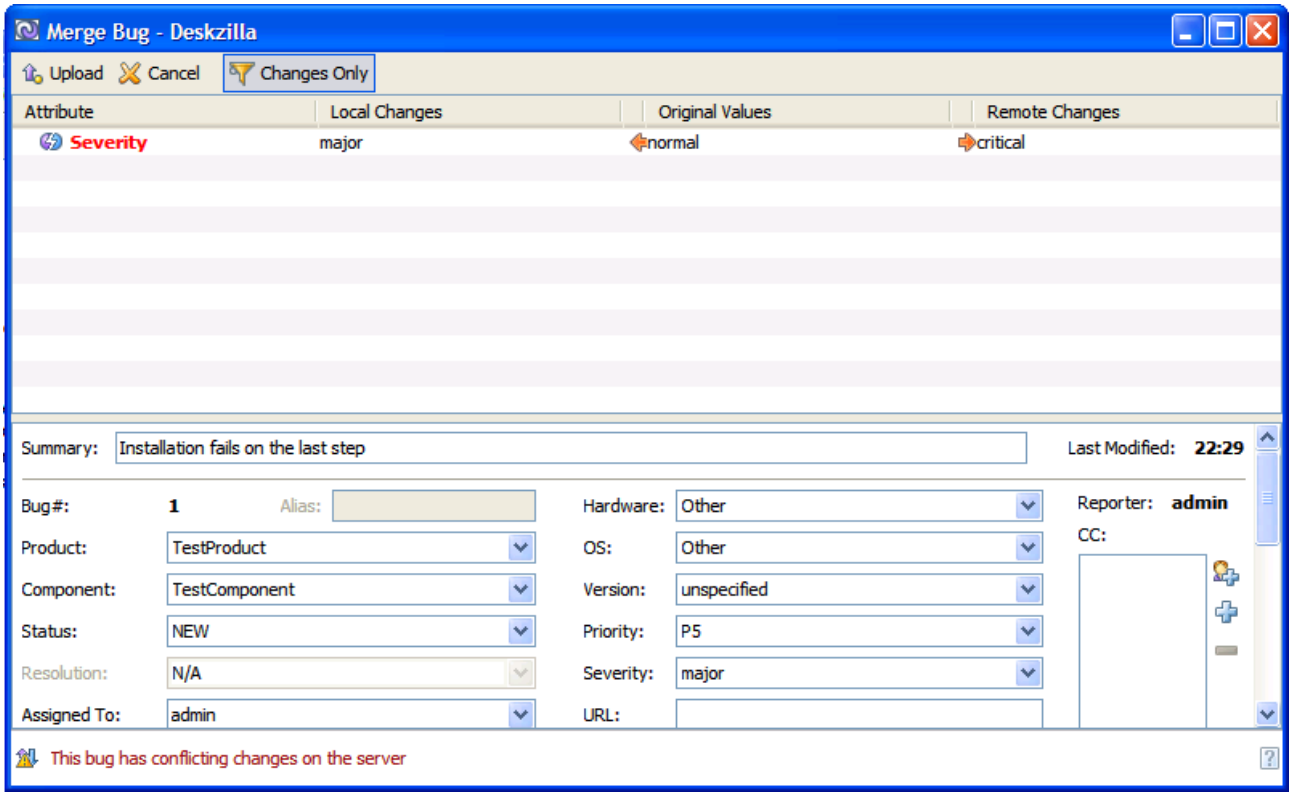
Since there is a period of time between the bug update from Bugzilla and upload of your changes to Bugzilla, bugs can be modified in Bugzilla by other users at the same time as you modify them. These changes may not conflict with your changes - for example, you modified the bug status and another user added a comment. In this case the changes will be automatically merged when you download the bug updates from Bugzilla or upload your changes.

However, there is a number of situations when changes made by two users are not consistent; for example, when both users change the same field. In this situation Deskzilla will detect this inconsistency during the synchronization (download or upload) and will show the notification about the conflict and synchronization problem in the status bar 

.

Click the conflict icon to see the bugs which have conflicts. Right-click one of the bugs and select **Merge** (press **CTRL + ALT + M**) or click the Merge icon on the bug status bar at the bottom of the bug details area.

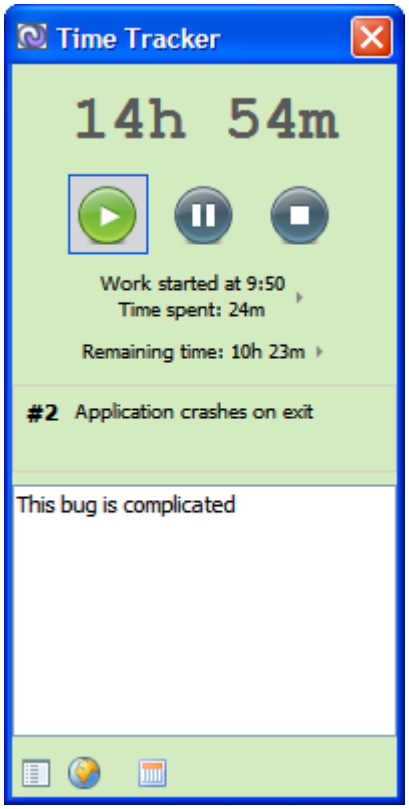
In the **Merge** dialog you can see the list of fields which are conflicting, their initial values, your local values and the values submitted by other user. Use the **Changes Only** button to show/hide non-conflicting bug fields as well. In the bug details form below the conflicts list you can change the values for the conflicting fields specifying values which you want to upload. By default the conflicting fields reflect your local changes. Click the **Upload** button to upload them to Bugzilla.



6 Time Tracking

Time tracking feature allows to record time spent working on bugs, generate and modify timesheets and publish them to Bugzilla.

Every time you start working on a bug select this bug in the table and click the **Work on Bug** button on the bug toolbar or select **Time | Work on Bug** (press **CTRL + G)**. The bug will be tagged with the special icon in the **Bug Table** and the time tracker window will appear.



The time tracker window shows the following information:

- How much time was spent on the bug in total
- The work status (working, paused, stopped). If the tracking is on, the **Start Tracking** button is selected and the window is colored green. If tracking is paused, both **Start Tracking** and **Pause Tracking** buttons are selected and the window is colored gray. If tracking is stopped, no buttons are selected and the window is colored red.
- Time of the latest status change and time spent during the latest work period. These values can be adjusted if, for example, you forgot to turn on/off the time tracker or tracked time for the wrong bug. See the Adjusting Work Time section for details.
- Remaining time. When tracking starts this value is taken from the bug **Hours Left** field if it is available. As you work on the bug the remaining time elapses. You can also manually adjust the remaining time by clicking the **Remaining time** label and setting the desired time. Once you publish this time record the **Hours Left** field of the bug is updated with the remaining time value.

- Bug number and summary.
- Comments for the current work period. In this field you can provide the comments which will be saved when the work is stopped or paused.

The buttons at the bottom of the window allow you to open the details for the bug you currently work on in a separate window ( ), view the bug online ( ), or open the **Edit and Publish Time** dialog ( ).

If you plan to stop working on a bug for a while and then resume your work, click the **Pause** button or select **Time | Pause Tracking**. Click the **Start Tracking** button to resume. If you provided any comments they will be saved and attached to this record in the timesheet.

If you finished working on the bug or you need to switch to another bug, click **Stop**. Your work record will be added to the timesheet. If you provided any comments they will be saved and attached to this record in the timesheet.

> You can configure the time tracker to detect the periods when you do not use your computer and automatically pause the time tracking and adjust the time record. See the Time Tracking Configuration section for details.

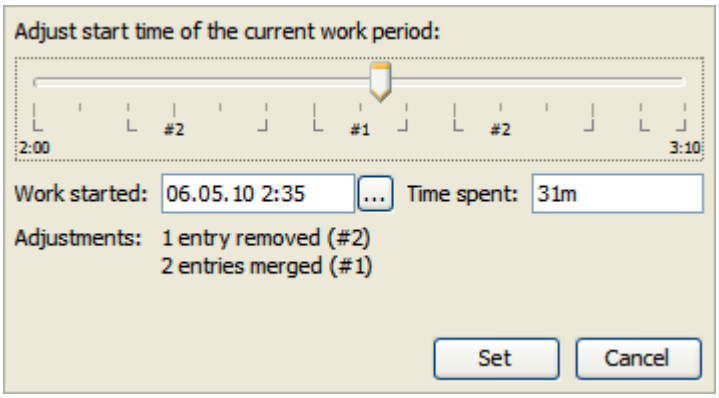
You can only work on one bug at any moment of time, so if you are working on one bug and then run time tracking for another one, your work on the first bug will be automatically stopped.

6.1 Adjusting Work Time

As you work on the bug you can modify the start and finish time of your current work period. This can be necessary if, for example, you forgot to start time tracking when you started working on the bug, or vice versa - forgot to stop it when you actually stopped working on the bug.

To adjust the work start time:

1. As the **Time Tracker** is running click the **Work started/Time spent** label on the **Time Tracker**.
2. The start time adjustment control is shown.

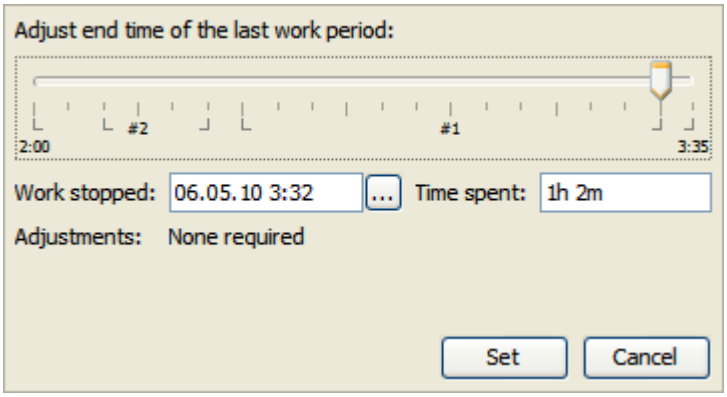


3. By default the slider is located at the position representing the tracking start time.

4. You can adjust the start time, dragging the slider to the left. In Deskzilla you can only work on one bug at a time, which means no records can overlap. So as you move the start time to the left, necessary adjustment are made to other records marked on the time line. Depending on the slider new position records are adjusted, removed, or merged (if the slider is positioned on the work period of the same bug).
5. Click **Set** to save the changes.

To adjust the work finish time:

1. As the **Time Tracker** is paused or stopped click the **Work stopped(paused)/Time spent** label on the **Time Tracker**.
2. The finish time adjustment control is shown.



3. By default the slider is located at the position representing the tracking finish time.
4. You can adjust the finish time, dragging the slider to the left. If you drag the slider further than the start time mark on the time line, the current record will be removed.
5. Click **Set** to save the changes.

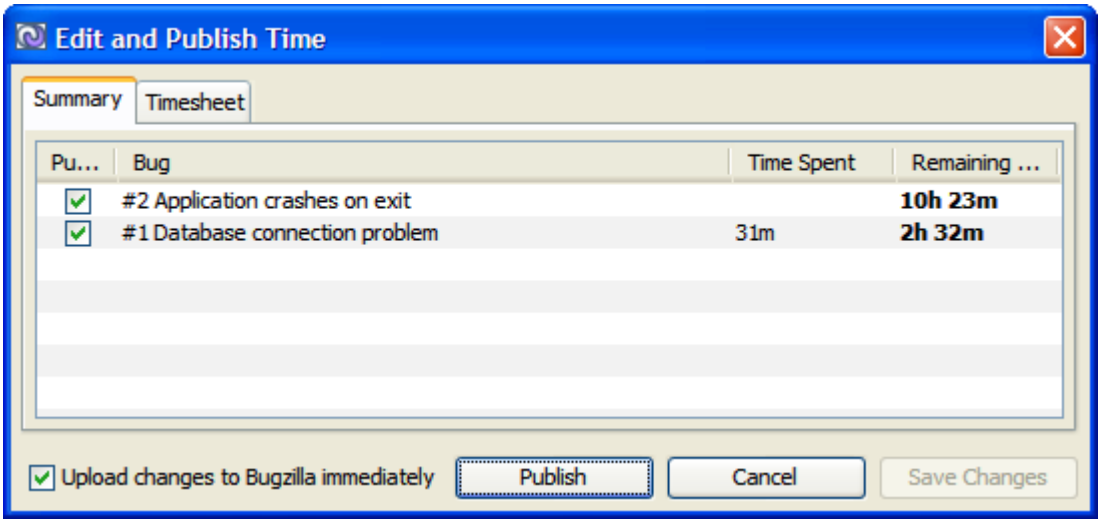
Once the work is stopped and the record is saved to the timesheet, it can be edited in the **Edit and Publish Time** window. See the Timesheets Publishing section for details.

6.2 Timesheets Publishing

As you start working on a bug a new record is added to the timesheet. To view it, click the **Edit and Publish Time** button in the **Time Tracker** window or on the application toolbar.

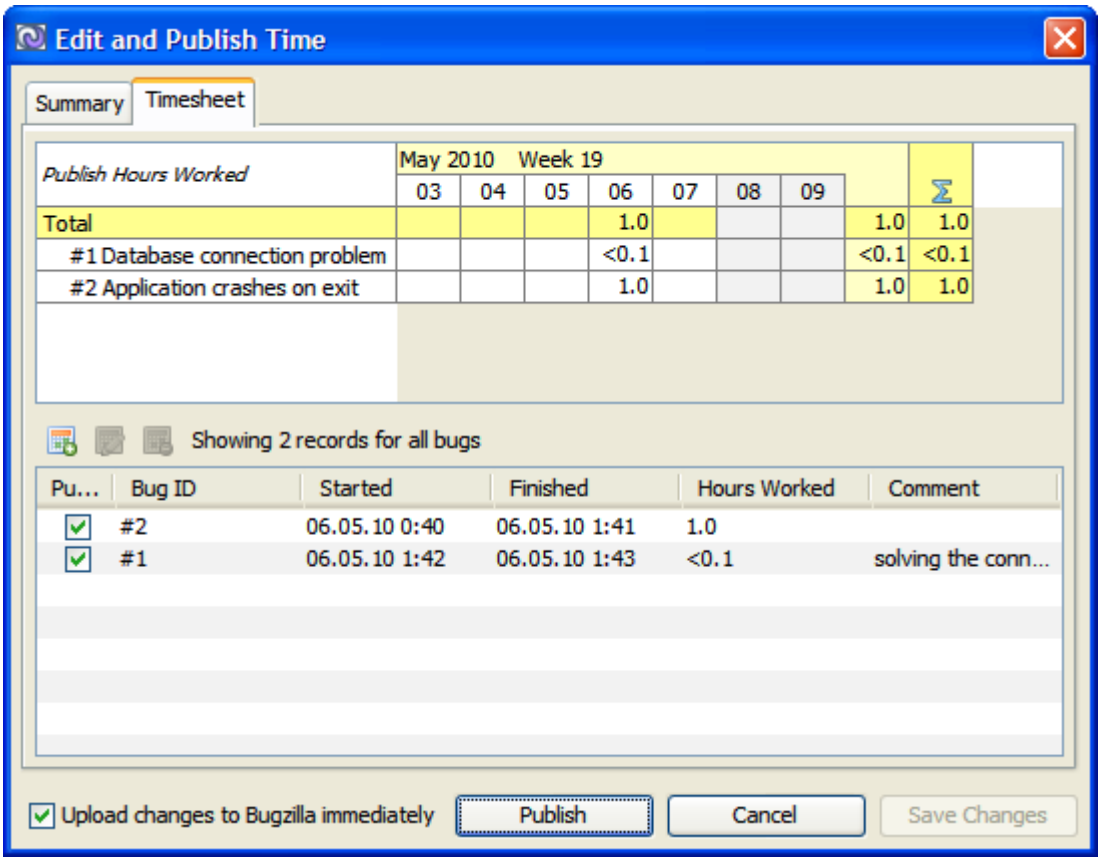
The **Edit and Publish Time** window shows all work records which were not published. It has two tabs:

- **Summary**. The **Summary** tab shows the list of bugs you worked on, the time spent on each of them and the remaining time.



Since Bugzilla only supports basic data for time tracking (hours spent and hours left), there is no way to save every separate work record to the server. So the timesheets are used locally for users convenience only. When the records are published the only information that is saved to the server is the number of hours spent and left for each bug, so before publishing you can edit these values on the summary tab without adjusting the timesheet. Click the number you wish to edit and set a new value.

- **Timesheet**. The **Timesheet** tab shows the number of hours spent on each bug broke down by days and lists all unpublished work records. Each record represents an uninterrupted work period. Once you start working, a new record is created in the timesheet and its **Hours Worked** value and **Finished** time are continuously updated as you work. When you stop or pause your work the record is saved and a new record is created when you start working again. However, if you pause or stop your work for less than a minute and then resume work on the same bug, the latest record is continued instead of creating a new one.



On the Timesheet tab you can add, edit or remove records:

- To add a record, click the **Add** button and in the **Add Work Period** dialog specify the bug number and work start/finish time.
- To edit a record, select it in the list and click the **Edit** button . Make the required changes in the **Edit Work Period** dialog.
- To remove a record, select it in the list and click the **Delete** button or press **DEL**.

If you do not want to publish modified records straight away you can just save changes by clicking the **Save Changes** button. In this case you will see your changes when you open the **Edit and Publish Time** window next time.

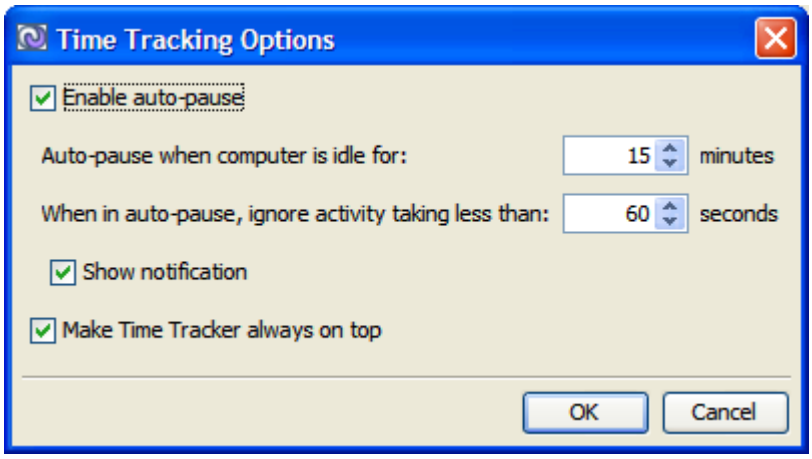
Once your timesheets are complete and corrected as required you can publish them.Publishing a record will remove it for the records lists and timesheets and save the hours spent on the bug to the **Hours Worked** fields of the bug.

To publish the records, select the records you wish to publish on the **Timesheet** tab or bugs on the **Summary** tab and click the **Publish** button. After the records are published the bugs **Hours Worked** and **Hours Left** fields are updated.

Select the **Upload Changes Immediately** check box if you want Deskzilla to upload published data to your Bugzilla server immediately. If the check box is not selected this information will be uploaded to server with other bugs details.

6.3 Time Tracking Configuration

The **Time Tracking Options** dialog allows you to set up several options for time tracking.



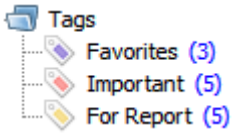
When auto-pause function is turned on Deskzilla pauses time tracking if the computer is idle for the specified period of time and adjusts the work time accordingly. For example, if the auto-pause time is 15 minutes after 15 minutes of idle the work is paused and 15 minutes are subtracted from the time counter.

Select the **Show notification** check box to see the notifications about auto-pause going on and off. The notification is shown as a system tray notification and only works if the **Use System Tray** option is selected. You can select it in the **Tools** menu.

7 Tags

The Tags feature allows to create personal tags and use them to tag bugs. Each bug can be tagged with several tags.

Tags are displayed at the top of the navigation area and work as queries. You can double-click a tag to see bugs that are tagged with it.



Your tags are saved locally and are not visible to other users.

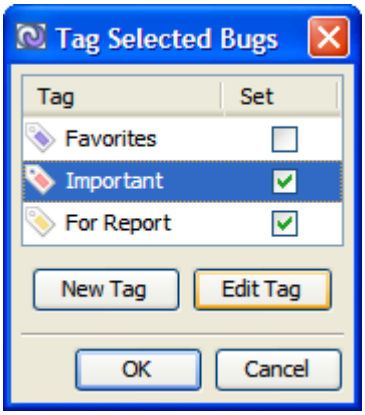
To add a new tag:

1. Right-click the **Tags** root folder and select **New Tag** or select **Bug | New Tag**.
2. Specify the tag name and tag icon and click **OK**.

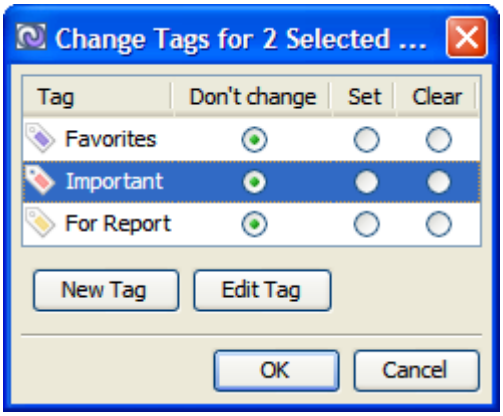
To tag bugs:

- Select bugs you wish to tag in the bug table and drag them to the required tag folder in the navigation area or

- Select bugs you wish to tag, right-click the selection and select **Tags**. One of the two dialogs is shown:
    1. **Tag Selected Bugs**. This dialog is shown if all selected bugs have the same tags (this is always true if only one bug is selected). Select or clear the the required check boxes. Click **New Tag** to create a new tag and then assign it. Click **Edit Tag** to modify the currently selected tag if necessary.



    2. **Change Tags for Selected Bugs**. This dialog is shown if the selected bugs have different tags. For each tag select one of the tree option: **Don't change, Set, or Clear**. Click **New Tag** to create a new tag and then assign it. Click **Edit Tag** to modify the currently selected tag if necessary.



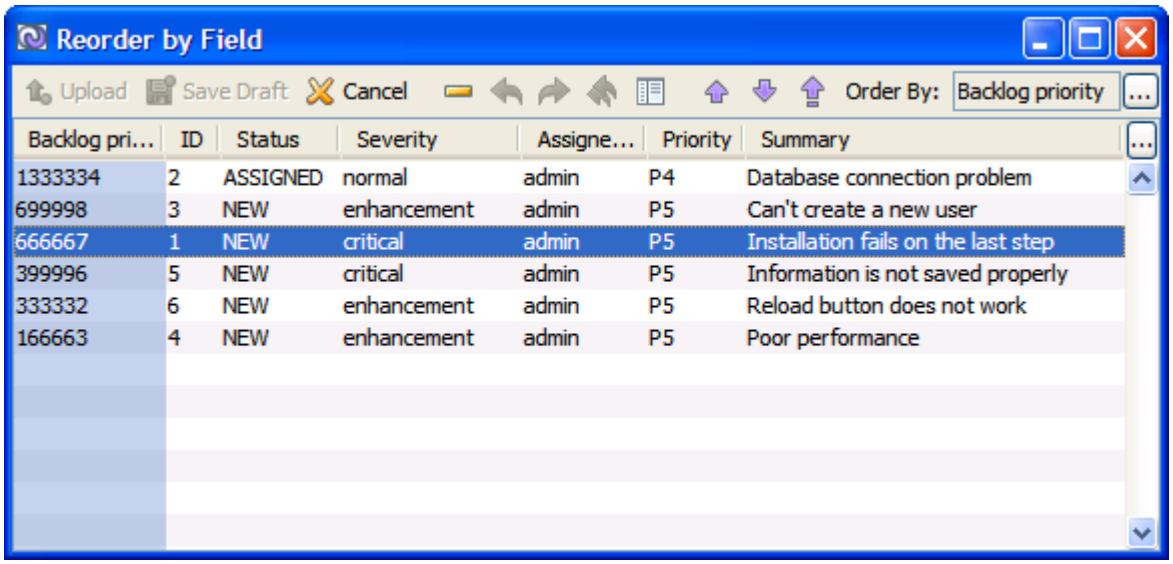
8 Bugs Reorder

The bugs reorder feature allows to arrange bugs in a specific order, which does not depend on any of the bugs standard fields, and save this order. A custom field is used for this feature so it should be created in Bugzilla before using this function.

Once a custom field is created and Bugzilla configuration is reloaded, you can access reorder function selecting **Reorder by Field** from the **Tools** menu (press **CTRL + R**) or clicking the **Reorder by Field** button on the bug table toolbar.

In the **Reorder by Field** dialog arrange the bugs in the required order using the **Up** and **Down** arrow buttons or the drag-and-drop function. As you reorder the bugs the custom field used for reorder is automatically assigned with numeric values - the higher the position, the bigger the number.

After the order is uploaded to Bugzilla other users will see the bugs in this order.



9 Exporting Bugs

Deskzilla allows to export bugs information to several formats including CSV, HTML, XML and PDF.

To export bugs information search for the bugs to export and click the **Export** button  on the table toolbar. The **Export** dialog shows the current settings and allows to adjust them. In the **Export** dialog specify:

1. Exported Attributes. Click the **Exported Attributes...** button and in the attributes dialog select and arrange bugs fields to include in the export. Use the **Add** and **Remove** buttons to modify the **Selected Attributes** list and the **Up** and **Down** buttons to arrange the attributes order. Click the **Same as in Bugs Table** button to use the same attributes as in the bugs table.
2. Locale and formats. Click the **Formats...** button to set the locale and number and date formats. Select the locale and adjust the formats if necessary. You can select from the standard formats or specify your own custom format.
3. Destination format and its settings:
    - Comma-separated file (CSV)
    - HTML
    - XML
    - PDF

CSV, HTML and XML files can be created in a temporary folder. In this case the file location is set automatically. If you want to create a file at some specific location, remove the check box selection and specify the location and file name.

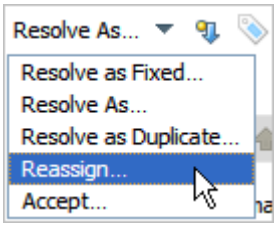
You can use the **Quick Export** button  to export files with the last used parameters.

10 Advanced Topics

This section covers advanced features of Deskzilla, such as workflow customization, using the command line options, etc.

10.1 How to Customize the Bugs Workflow

Deskzilla application allows users to customize the bugs workflow by defining a set of actions which can be applied to a bug or a number of bugs. The actions (for example, Resolve As, Reassign, Close) are defined in the XML file and can be accessed through the Workflow drop-down menu on the Bugs Toolbar.



Below is the explanation of the XML file structure and tags used to define new workflow actions, which will allow you to create new actions and modify the existing ones.

10.1.1 Default Workflow

By default, workflow actions are pre-configured for the standard Bugzilla workflow (http://www.bugzilla.org/docs/3.0/html/lifecycle.html). Starting with Bugzilla version 3.2, Bugzilla administrator can customize statuses and workflow in Bugzilla, and so you might need to change the definition of the workflow in workflow.xml accordingly.

Even if you don't change workflow.xml, you still will be able to change status for a bug using Edit Bug dialog. However, workflow actions are useful to make bulk changes and to change several fields at once.

10.1.2 Actions

The **action** tag is used to define the action and its preconditions.

```
<action>
  <name>Resolve As</name>
  <condition>Open</condition>
  <!-- Or, instead of condition tag: <filter>status in (UNCONFIRMED NEW ASSIGNED
REOPENED)</filter> -->
  <set>
    <!-- action script -->
  </set>
</action>
```

It consists of three mandatory sub-elements:

- The **name** tag, which defines the name of the action shown in the UI components (for example, Workflow combo box).
- Action applicability condition, which defines which conditions a bug must meet to be eligible for the action. Action applicability can be defined either by referring to the condition (see page 44) defined earlier or by specifying a filter statement using the **filter** tag and the same syntax as is used for the condition definition.
- The **set** tag, which defines the action script which runs when the action is applied. The script may contain both defined actions (for example, change the status value to **Closed** for the **Close** action) and actions, which require user input (for example, get the user comment when the bug status is changed).

Optionally an action may contain the **windowId** child tag, which defines the window identifier used to refer to the visual properties of the action window (for example, size, position, etc). This identifier can be used to apply one window configuration for several actions. If not specified the action name is used to generate the identifier.

Below is the explanation of the action script syntax and tags.

Conditions

Bugs must meet specific conditions to be eligible for the action. These conditions are defined outside or inside the **action** tags using the **condition** tag and then used in the **action** element.

```
<condition>
  <name>Open</name>
  <filter>status in (UNCONFIRMED NEW ASSIGNED REOPENED)</filter>
</condition>
```

The Condition element has two child tags, both of which are mandatory:

- The **name** tag defines the name of the condition by which it can be referred to later.
- The **filter** tag defines the condition itself. The syntax is same as in the Query Builder.

The Workflow.xml file uses the same syntax as the Query Builder for conditions definition, so the statements can be first created in the Query Builder and then copied to the XML file. To do that, open Query Builder, create the required filter, then right-click on the condition in Filter: section in the Query Builder and select Copy. Then paste the text from the clipboard into the <filter> tag.

Action Script

Action script is provided in the **set** tags and defines a number of changes that are made to the bug as a result of the action (the action that defines no changes does not make sense, but is valid). Each script element defines which field of the bug is altered and how.

Below is the description of tags used to define the fields changes.

value

The value tag assigns the specified value to the field defined in the **name** tag.

```
<attribute>
  <name>status</name>
  <value>RESOLVED</value>
</attribute>
```

This tag is applicable for enumeration fields only (for example, status or assignee). The tag content is the textual representation of the desired value.
When the action is selected from the Workflow combo box the modified field is shown to user in the Action window with its new value and in the read-only mode.

askAddTextElement

The tag adds a text value and is shown as the text box in the Action window.

```
<attribute>
  <name>comments</name>
  <askAddTextElement>$(bz.form.label.comment!mnemonic=o):</askAddTextElement>
  <checkbox>$(bz.form.label.privateComment!mnemonic=p)</checkbox>
</attribute>
```

This tag can only be used to add comments to a bug and should be used as shown in the example. Content of **askAddTextElement** defines the text box label. Content of **checkbox** defines the label shown next to the "private comment" checkbox, which defines if the comment is visible to other users. Content of both tags can be filled with any text.

askAddNotEmptyTextElement

This tag is the same as askAddTextElement (see page 45), but makes the comment mandatory. The action cannot be completed unless the comment is specified.

askReference

This tag prompts a user to select a single enumeration value. It is shown in the Action window as a combo box populated with the possible field values with the editing option disabled.

```
<attribute>
  <name>resolution</name>
  <askReference>$(bz.field.Resolution!mnemonic=r):</askReference>
  <exclude>N/A</exclude>
  <exclude>DUPLICATE</exclude>
</attribute>
```

The content of **askReference** specifies the label text.
This element supports additional **exclude** tags which remove the specified values from the values list.

askEditableReference

This tag works as the askReference (see page 46) tag, but allows user to type in new values and is shown as a standard combo box in the Action window where a user can either select an existing value or type in a new value. The **exclude** tags are not supported for this element.

askString

This tag prompts a user to change the value of the text field when the action is performed by specifying the new value in the text box.

```
<attribute>
  <name>duplicate_of</name>
  <askString>$(bz.field.DuplicateOf!mnemonic=d):</askString>
</attribute>
```

10.1.3 Available Attributes

Here's the list of attributes that can be used in workflow.xml:

Attribute ID (use in <name>)	Available actions
product	value,askReference
component	value,askReference
version	value,askReference
milestone	value,askReference
platform	value,askReference

operating_system	value,askReference
priority	value,askReference
severity	value,askReference
resolution	value,askReference
status	value,askReference
assigned_to	value,askReference,askEditableReference
qa_contact	value,askReference,askEditableReference
reporter	value,askReference,askEditableReference
id	
cc	
comments	askAddTextElement, askAddNotEmptyTextElement
attachments	
summary	askString
status_whiteboard	
alias	askString
url	askString
keywords	
modification_timestamp	
creation_timestamp	
blocks	
blocked_by	
duplicate_of	askString
Deadline	
estimated_time	
actual_time	
remaining_time	
groups	
seeAlso	

10.2 9. IDE Integration

10.2.1 9.1 IntelliJ IDEA

10.2.2 9.2 Microsoft Visual Studio

10.3 Deploying Deskzilla On Multiple Computers

There are several tricks that simplify Deskzilla installation and configuration when deployed on a multiple computers in an organization.

deskzilla.properties

Deskzilla will seek for *deskzilla.properties* file in its home directory when it starts. This file may contain any Deskzilla Command Line Options with values. For example,

```
deskzilla.license=my_deskzilla.license
   deskzilla.workspace=c:\deskzilla.workspace
```

This file may be distributed to all users, or it may be added to Deskzilla ZIP distribution file before Deskzilla is set up on user computers.

10.4 Deskzilla Command Line Options

See How to Use Deskzilla Command Line Options (see page 54)

deskzilla.license
Accepts: valid file path (either absolute or relative to Deskzilla installation directory)
Since: 1.2
Sets the license key to be used. If not set, the user may be asked for a license key. If set to an invalid or non-existing file, Deskzilla will not be able to start.

deskzilla.workspace
Accepts: valid directory path
Default: .Deskzilla subdirectory in the user's home dir Since: 1.2
Sets the workspace to be used. Alternatively, the workspace directory may be specified as a parameter, e.g. *deskzilla.exe /home/me/myWorkspace*.

deskzilla.home
Accepts: valid existing directory name
Since: 1.0
Sets the home directory for Deskzilla. If not set, the directory is guessed based on the current directory and the directory where Deskzilla executables are located.

deskzilla.debug
Accepts: true/false
Since: 1.0
If set to true, Deskzilla will give more detailed output to the console and to log files.

no.splash
Accepts: true/false
Since: 1.0
If true, Deskzilla will not show a splash screen when starting.

show.unsync.counters
Accepts: true/false
Since: 1.1
If true, unsynchronized queries will also show the number of bugs (in the database).

debug.counters
Accepts: true/false
Since: 1.1
If true, Deskzilla will log statistics about queries counting.

no.winlaf
Accepts: true/false
Since: 1.0
If true, do not patch Windows look and feel with winlaf project.

use.metal
Accepts: true/false
Since: 1.0
If true, use metal look-and-feel.

socket.timeout
Accepts: positive integer number (milliseconds)
Default: 30000
Since: 1.0.2
Defines the SO_TIMEOUT parameter for all sockets in the application. If there's no response from server for the specified amount of milliseconds (not seconds!), the connection will abort.

force.http10
Accepts: true/false
Since: 1.1
Makes Deskzilla connect to HTTP servers using HTTP/1.0 regardless of server capabilities.

force.http11
Accepts: true/false
Since: 1.1
Force HTTP/1.1. Not used.

bugzilla.dump
Accepts: all/errors
Since: 1.0.2
Makes Deskzilla log pages that are returned from Bugzilla into "bugzilla" folder under "log" folder. If set to "errors", only pages that caused exceptions or errors will be logged.

disable.new.version.check
Accepts: true/false
Since: 1.1
If true, no automatic checks for a new version of the application will be made.

font.size
Accepts: integer
Since: 1.1
Changes default font size for the application. The number corresponds to the font size of a label. If default font size of some component is different from the default size of a label, then the size will be scaled.

font.size.abs
Accepts: integer
Since: 1.1
Changes default font size for the application. Sets the specified number as the default font size for all components.

auto.sync.period
Accepts: integer
Since: 1.1
Obsolete as of: Deskzilla 1.6, JIRA Client 1.3 (use full.sync.period and quick.sync.period)
Default: 30
Sets the number of minutes between automatic resynchronization.

auto.sync.period.failed
Accepts: integer
Since: 1.1
Obsolete as of: Deskzilla 1.6, JIRA Client 1.3 (use full.sync.period.failed)
Default: 10
Sets the number of minutes between automatic resynchronization.

arial.unicode
Accepts: true/false
Since: 1.1.1
Default: unspecified
If set to true, forces Deskzilla to use font "Arial Unicode MS" instead of Tahoma. This may be needed to make Deskzilla display Chinese characters correctly.

form.combobox.drop.count
Accepts: positive integer
Since: 1.2.1
Default: OS-specific
If set, overrides the default value for the maximum number of options appearing in the drop-down box of certain comboboxes (Component, Version, Milestone, etc).

debug.httpclient
Accepts: true/false
Since: deskzilla 1.3
Default: false
If set, allows all httpclient log messages into the application log.

bugzilla.xml.maxload
Accepts: positive integer
Since: deskzilla 1.5.1
Default: 100
Sets the maximum number of bugs requested from Bugzilla's xml.cgi with a single HTTP request. When Deskzilla needs to download more bugs, it will break download into several requests.

jira.xml.maxload
Accepts: positive integer, 10 <= maxload <= 1000
Since: jiraclient 1.3
Default: 100
Sets the default page size for loading issues in XML form from issue navigator. Note that even if you set maxload to some value, JIRA Client may in certain cases ask for larger pages in order to perform correct download.

jira.reload.stepback
Accepts: positive integer (milliseconds)
Since: jiraclient 1.3
Default: 64800000 (18 hours)
Sets the amount of time JIRA Client steps back from synchronization point when loading changed issues.

full.sync.period
Accepts: positive integer (minutes)
Since: deskzilla 1.6, jiraclient 1.3
Default: 720 (12 hours)
Sets the period of full synchronization, which loads all metadata from the server and may take some time.

full.sync.period.failed
Accepts: positive integer (minutes)
Since: deskzilla 1.6, jiraclient 1.3
Default: =full.sync.period
Sets the period between failed full sync and next full sync attempt.

quick.sync.period
Accepts: positive integer (seconds)
Since: deskzilla 1.6, jiraclient 1.3
Default: 150 (2.5 minutes)
Sets the period between quick synchronizations

jira.loadmeta.pt.max
Accepts: positive integer
Since: jiraclient 1.3
Default: 100
If the PROJECTS*TYPES number is greater than this setting, JIRA Client will not load custom fields per-project, per-issuetype. If you have large number of projects and your custom fields are highly configured (enabled for specific projects AND issue types), you might need to increase this number.

no.spellcheck
Accepts: "true"
Since: jiraclient 1.3, deskzilla 1.6; not effective in jiraclient 1.7
Default: -
Use this option to disable spell checker.

spellcheck
Accepts: "true"
Since: jiraclient 1.7
Default: -
Use this option to enable spell checker.

dz.ignore.product.defaults
Accepts: "true"
Since: deskzilla 1.6 hf 15
Default: -
Starting with version 1.6, Deskzilla sets all values on the New Bug form to the product defaults, as seen on the "New Bug" Bugzilla web page. Use this option to make Deskzilla behave like in older versions: remember the last used values for fields per project.

bugzilla.qload.noattach
Accepts: "true"
Since: deskzilla 1.6
Default: -
When set, Deskzilla will ask Bugzilla not to send attachments with xml bug info. This option may be used as a workaround to out-of-memory caused by a large attachment in XML.

bugzilla.xml.req.mindelay
Accepts: integer from 0 to 60
Since: deskzilla 1.7
Default: 0
When set to non-zero, defines the number of seconds that must pass between consecutive page load during long query download.

10.5 How to Clear Local Database

10.5.1 Purpose

Clearing local database (and following reloading issues from server) may be required to optimize Deskzilla performance, or to reset local database that has invalid state.

When you clear the local database, you remove all issues and metadata downloaded from the server. Local tags, local changes and some other information is also removed.

10.5.2 Preparations

Please make sure you have all your information backed up, as described below.

Upload all local changes

When database is cleared, all local changes are lost. So before proceeding, upload all changes you don't want to lose to the server. To do so, use menu **Connection | Upload Changes** and wait until *Synchronizing...* message in the status bar disappears.

Back up local tags

If you use Favorites or other local tags, and would like to keep them after database is cleared, you need to back them up. Export all the tags you would like to preserve using Local Tags Export and Import (see page 55). You will need to import them back after database is cleared.

Back up workspace

This will make sure you will be able to run Deskzilla with the old workspace if anything goes wrong. See How to Backup Your Workspace (see page 58).

10.5.3 Procedure

To clear Deskzilla local database:

1. Make sure you have uploaded local changes, backed up local tags and backed up workspace, as advised above.
2. Stop Deskzilla if it is running.
3. Locate workspace directory (see page 64) .

4. Manually remove the following from the workspace directory:
    1. files **items.db** and **items.db-journal**, whichever are present;
    2. **db** sub-directory, if present;
    3. **system** and **system2** sub-directories, whichever are present.
5. Start Deskzilla.
6. Run full synchronization using menu **Connection | Reload Bugzilla Configuration**. (The full synchronization may have started on its own - see the application status bar.)
7. Run queries that you'd like to have downloaded to the local database.

10.6 How to Customize Field Names

Reason: Match field names in Deskzilla with field names in customized Bugzilla.

Result: Deskzilla will display customized field names in bug views, bugs table, and other places.

Procedure:

- Locate your workspace directory (it's normally shown in Deskzilla main window title). By default, workspace directory is ".Deskzilla" under user's home directory.
- Shut down Deskzilla if it is running.
- Copy file *bugzilla-terms.properties* from *etc* directory under Deskzilla installation directory into *etc* directory under your workspace. Create *etc* directory under your workspace if needed.
- Edit *bugzilla-terms.properties* file in your workspace and change default field names.

What's next: Start Deskzilla and see if customized names are there.

10.7 How to Use Deskzilla Command Line Options

See also: Deskzilla Command Line Options

Deskzilla command line options are passed as java properties. For example, to set **no.splash** property to *true*, you need to pass **-Dno.splash=true** option to Java.

Option 1 [Windows]:

```
deskzilla.exe -J-Dno.splash=true
```

Option 2 [All OS]:

```
java -Xmx256m -Dno.splash=true -jar deskzilla.jar
```

Option 3 [All OS]:
Create a file named "deskzilla.properties" in Deskzilla installation folder and put there the following line:

```
no.splash=true
```

10.8 Starting with a Different Workspace

This article is written for Deskzilla, but can equally be used for JIRA Client. Simply replace *deskzilla* with *jiraclient* where appropriate.

By running Deskzilla with different workspaces, you can work in different environments, similar to working with different documents in an editor.

10.8.1 Selecting Workspace with a Command-Line Parameter

To run Deskzilla with a different workspace, you can specify it as a command-line argument:

Operating System	Running Deskzilla
Windows	deskzilla.exe c:\my_workspace
Linux, Mac OS X	java -Xmx400m -jar deskzilla.jar /path/to/workspace

10.8.2 Selecting Workspace with Properties File

You can use properties file to select the workspace Deskzilla will start with. Create *deskzilla.properties* (*jiraclient.properties*) file in the same directory where Deskzilla is installed, and place a single line there. See examples below:
For MS Windows:

```
deskzilla.workspace=c:\\my_workspace
```

If you use MS Windows don't forget to use double back slash in the path you provide.

For Mac OS X and Linux:

```
deskzilla.workspace=/path/to/my_workspace
```

10.9 How to Export And Import Local Tags

This article applies to: **Deskzilla 1.x-2.x**
This article is written about Deskzilla, but it applies to JIRA Client as well.

10.9.1 Purpose

Local tags are stored in the local database and not synchronized with the server. Those are your tags you used to mark issues.

Sometimes you'd want to share tagged issues or save information which issues were tagged.

10.9.2 Exporting Tags

For each tag you would like to export, do the following:

1. Double-click on the tag folder in the navigation area (under "Tags" folder);
2. When Deskzilla shows the full list of tagged issues, click in the issues table and press Ctrl+A (Meta+A on Mac OS X) to select all issues;
3. Use right click | *Copy* or Ctrl+Insert or Ctrl+C (Meta+X on Mac OS X) to copy issues to clipboard;
4. Open any text editor such as notepad or new e-mail, and Paste there. A list of issue URLs should be inserted into the text. If exporting several tags, make sure the lists don't mingle;
5. Make note of the tag's name, if necessary;
6. Save or send this text for further import.

The same procedure can be applied to a result of any query, not necessarily tags.

10.9.3 Importing Tags

For each tag you're importing, do the following:

1. Make sure you have set up a connection(s) with the same URL as in the exported issues URLs;
2. Create a new tag with the desired name;
3. In a text editor, select all the text with the previously exported list of issue URLs, and Copy to clipboard;
4. In Deskzilla navigation area, select the target tag, and use right-click | *Paste*.
5. Issues will be downloaded if necessary and tagged.

10.10 How to Optimize Deskzilla for Working With Many Bugs

This article applies to: Deskzilla 1.x-2.1
This article is written about Deskzilla, but it applies to JIRA Client as well.

10.10.1 Problem

When there are many issues on the server, you may notice that Deskzilla can download and store more issues in the local database than it can efficiently handle. For example, when there are too many issues in the local database, Deskzilla can consume a lot of memory and CPU.

As of Deskzilla 1.7, the approximate reasonable issues limit stored in the local database is 20,000 issues.

To see how many issues you have in the local database, take a look at the application status bar.
tbd:screenshot

This problem has been around for a while, and it will be fully solved in the future versions of the applications.

10.10.2 Solution

To solve the problem described above, we recommend you to to either configure connections (see page 57) or download fewer issues (see page 57), and if it still does not improve the application performance, you can clear your database (see page 58).

Configuring Connections

You have configured one or more connections to work with the application. Please make sure they are optimally configured.

If you have a lot of projects hosted on the server, you should limit the connection to the projects you're working with. This will make sure no unnecessary issues are downloaded during quick synchronization. It will also speed up full synchronization because less metadata will be downloaded.

Downloading Fewer Issues

If there are more issues in a single project than Deskzilla can handle, you shouldn't download all of them in the local database. Create a query that describes the issues that you're working with (for example, "all open issues or all issues assigned to me"), and make it top-level query. Create sub-queries under that query to make sure you won't download unnecessary stuff.

tbd:add links to creating queries, description of query synchronization

Clearing Local Database

If you already have downloaded more issues than it feels comfortable, the only way to remove them from the local database is to completely clear it and download relevant issues once again. Please see How to Clear Local Database.

Removing a connection does not clear issues from the database, although the issue counter will drop. The database in versions 1.x can only grow.

10.11 How to Backup Your Workspace

This article is written about Deskzilla, but it applies to JIRA Client as well.

10.11.1 Purpose

Deskzilla stores all local information in a workspace, so by backing up workspace, you save the current state of work in Deskzilla. In the future, you will be able to restore the workspace (or start Deskzilla with the saved workspace in a different location - see How to Move Deskzilla to Another Computer (see page 60)) and have access to the currently available issues and local changes, even if they are lost in the main workspace location.

10.11.2 Procedure

To backup a workspace:

1. Locate workspace directory.
2. Stop Deskzilla if it is running.
3. Use any backup tool or operating system's copy command to make a full copy of the workspace directory with all contents, including sub-directories.

10.12 How to change the URL of a Connection

Sometimes your Bugzilla server is moved to another web address and a connection set up in Deskzilla no longer works. One solution is to drop the old connection and create a new one, using the new address of the server, but that will cost you your downloaded issues, local changes and local tags.

This article explains how to change the URL of an existing connection. Please do that only in case the server has been moved; never change the URL to an actually different Bugzilla that way.

First, you need to see what the new URL is - open Bugzilla in your browser and look at the address bar.

Then:

1. Quit Deskzilla.
2. Use Notepad or other text editor to open config.xml in your Deskzilla Workspace.
3. Find the old server address (look for http:// or https://)
4. Replace it with the new one
5. Start the application

And that's it!

10.13 How to Open Attachments when Working Offline

> The article is written about Deskzilla, but it applies to JIRA Client as well.

10.13.1 Problem

It is impossible to access and read attached documents when working offline.

10.13.2 Solution

Deskzilla can open attachments when you are offline, but only if they have been previously downloaded. At the moment, Deskzilla does not download attachments automatically because there can be a lot of documents attached to all issues, and downloading a lot of information at a time can stress the server and consume a lot of bandwidth.

When you are online and have Deskzilla synchronize with the server:

1. Run a query to show all issues that may have attachments you may need when you are offline.
2. Press **Ctrl+A** to select all issues in **Issues table**.
3. If any of the issues are not fully downloaded (partially downloaded issues have half-filled box icon in the **Flags** leftmost column), right-click and select **Download** on the context menu (you can use this action only for the partially downloaded issues).
   Deskzilla downloads issues details, including whether there are any attachments to issues.

4. After all issues have been fully downloaded, right-click and select **Download Attachments** on the context menu to download all attachments for all selected issues. If this action is disabled, there are no attachments that were not downloaded.

   In the upcoming Deskzilla version, partially downloaded issues will already contain information about attachments.

10.14 How to Move Deskzilla to Another Computer

This article applies to: **Deskzilla 1.x-2.x**
This article is written about Deskzilla, but it applies to JIRA Client as well.

10.14.1 Problem

You have Deskzilla installation and some queries, issues and configuration in its workspace. You'd like to continue working with the application on another computer, preserving all the data.

10.14.2 Solution

1. Install Deskzilla on the new computer;
2. Copy workspace directory with all its contents to the new computer (to locate the workspace directory, see Deskzilla Workspace article);

   Compressing workspace directory to a ZIP file before moving will probably be more effective. The ZIP archive can then also be stored as a backup.

3. Copy or move license key to the new computer; (not applicable to Lite versions)

   Please observe license restrictions. A single-user license may be used on different computers, but only by a single person. A team license must not be used by more people than its capacity. Exceeding license limit may result in application errors.

4. Start Deskzilla on the new computer. Select license key file with *Help* | *License Key* menu, or when asked by the application.
5. Done! In case you're not seeing your data, verify that Deskzilla uses the workspace directory that you copied the original workspace to. Try to locate Deskzilla Workspace on the new computer and see if it contains the same files you copied.

10.15 How to Help ALM Works Investigate Problems

This article applies to:

- Deskzilla version 2.0 or later

To help with diagnosing the problem:

- Stop Deskzilla.
- Start Deskzilla with verbose logging turned on.
- Reproduce the problem.
- Send us log files.

Detailed instruction:

First, you need to **stop Deskzilla** because you have to re-start it with verbose logging. Note that you cannot start a second instance of the application on the same workspace -- it will bring up the already existing instance. Of course, you don't have to restart the application if you are already running with verbose logging turned on.

Second, you need to **start Deskzilla with verbose logging turned on**. This is done by running a special script, found in "bin" sub-folder under the program installation folder. The script may be named:

- debug.bat or debug.sh
- deskzilla_verbose.bat or deskzilla_verbose.sh

Then, reproduce the problem, so the related network communications are saved in log files. If the problem is not 100% reproducible, you can run the application in verbose mode until it happens.

When the problem has been reproduced, please locate and send us log files. They are stored under "log" sub-folder in your workspace folder. By default it is:

- On Deskzilla for Windows - C:\Documents and Settings\username\.Deskzilla\log
- On Deskzilla for Linux/Mac - ~username/.Deskzilla/log

Mind the dot before Deskzilla! You can make ZIP archive of all files in that directory (including sub-folders), and send to our support address.

You can also send only relevant log files. The structure of the log files is quite simple:

- tracker0.log - this is a general log files, please send it always;
- bugzilla/ - dumps of network interaction with Bugzilla.

Folder "bugzilla" has a sub-folder for each host that you work with, which in turn have a subfolder for each day (NB: this is the day when application was launched, not the day when server has been accessed).

Using this information, you can select only relevant log files. When in doubt, send all files.

Network dumps do not contain your passwords: they are obfuscated with asterisks or dropped.

Why we ask you to do it:

Deskzilla (*desktop client*) has lots of functionality dedicated to exchanging data with Bugzilla (*server*) over the network. Typically, a desktop client uses all available server interfaces to extract and submit data in the most effective way.

Servers are separate products, maintained by other companies. Servers have varying versions, and each server installation may have a unique configuration. We strive to support every possible configuration and every version that's not very old. But it's hardly possible to test desktop clients against every version/configuration.

When a problem that concerns client-server interaction arises, we might be able to reproduce and isolate the issue using only verbal description or screenshots. But since the problem lies beneath the user interface, chances are that information about how exactly did desktop client communicate to server will be required.

This information - message dumps - may be collected by you with little extra effort, and it may provide great help to us in dealing with the problem. Of course you are not obliged to do that, but we will really appreciate your help - it may be the only way to figure out what happened, what are possible workarounds and how to fix the issue

10.16 How To Install Deskzilla In Silent Mode

All latest versions of Deskzilla (starting 2.0) support silent install. We use install4j as installer and the silent install command line will look like:

```
deskzilla-2_1.exe -q
```

Complete reference to installer command line options may be found here:
http://resources.ej-technologies.com/install4j/help/doc/helptopics/installers/options.html

Once the installation is complete, you can also add the license key, so the user doesn't have to do it. This is done in two simple steps which can be scripted in a simple .bat file:

1. Place license key file in the installation root folder
2. Create a file called "deskzilla.properties" in the installation root folder with the following text:

```
deskzilla.license=<the name of the license file>
```

You can also create your own script for silent installation. Deskzilla installer has only two really important functions: it unpacks and copies files. So you can install Deskzilla once, add the license key and a configuration file (as described above), then make a ZIP archive of the Deskzilla's installation folder, and when you need to deploy it on a PC, simply unpack it from the archive to the desired location. There are a few things to remember when installing this way:

1. You won't get program group and shortcuts under "Start" menu.

2. The fact that Deskzilla is installed will not be recognized by Deskzilla installer, if it is run on that computer later. (The installer won't suggest the same directory and won't check if Deskzilla is running, otherwise it's ok.)
3. Use the full Deskzillat for Windows (which includes Java, in the "jre" folder in the installation root folder).

11 Terms Definitions

11.1 Deskzilla workspace

This article applies to: **Deskzilla 1.x**

11.1.1 Definition

Deskzilla workspace is a directory that contains all files and configuration created by Deskzilla, including:

- Local database
- Connections configuration
- Downloaded attachments
- Deskzilla customization files
- Logs

11.1.2 Location

By default, workspace is located in *".Deskzilla"* ("*.JIRAClient*") sub-directory in the user's home directory. The exact location depends on the operating system and its configuration:

Operating System	Default Deskzilla Workspace
Windows XP	C:\Documents and Settings\username\.Deskzilla
Windows Vista, Windows 7	C:\Users\username\.Deskzilla
Linux	/home/username/.Deskzilla
Mac OS X	/Users/username/.Deskzilla

If workspace location is different from default, you can see it in Deskzilla's main window title.

11.2 Deskzilla log files

Deskzilla log files contain history of actions performed by Deskzilla. Sometimes they are the only source of information for troubleshooting.

Deskzilla logs are contained in the **log** subdirectory under Deskzilla Workspace. Main log files have the form of **trackerNNN.log**. There could be other log files, such as dumps of all HTTP answers from Bugzilla.

11.3 Exception

Exception is an error in Deskzilla that is caught by the application. When it happens, an exception report window appears.

12 Cool Features

Drag-and-drop bugs modification

Copy-Paste bugs excahnge

13 Glossary

14 Keyboard Shortcuts

This section contains a complete reference for Deskzilla keyboard shortcuts

14.1 General

Action	Default PC Shortcut	Default Mac Shortcut
Create a new bug	**Ctrl + N**	**+ N**
Edit an bug	**Enter** or **F4**	**+ O**
Upload all local changes to Bugzilla	**F6**	**+ F9**
Upload changes for the selected bugs	**Shift + F6**	**+ F6**
Download changes for the selected bugs	**Shift + F5**	*** + F5**
Merge conflicting changes	**Ctrl + Alt + M**	**+ + M**
Edit a query	**Shift + F3**	**+ F3**
Create/edit a distribution	**Ctrl + D**	**+ F4**
Run quick text search within the selected query	**Ctrl + F**	**+ F**
Toggle the empty queries show/hide mode	**Alt** + click a query or folder	+ click a query or folder
Remove the selected options from a distribution	**Ctrl - (minus)**	**- (minus)**
Open query in a web browser	**Alt + F9**	**+ + B**
Run full synchronization	**Ctrl + F5**	**+ + F7**

14.2 For Selected Bugs

Shortcut	Default PC Shortcut	Default Mac Shortcut
Save Draft	**F2**	**F2**
Save and upload to Bugzilla	**Ctrl + Enter**	**+ Enter**
Open an bug in a web browser	**F9**	**F9**
Add a comment	**Ctrl =**	**=**
Attach a screenshot	**Ctrl + S**	**+ + A**
Attach a file	**Ctrl + Alt + F**	**+ + F**

Create a link	**Ctrl + L**	**+ L**
Log work	**Ctrl + [**	
Watch/stop watching a bug	**Ctrl + W**	**+Y**
Vote/unvote a bug	**Ctrl + O**	
Tag using local tags	**Ctrl + T**	**+ T**
Expand all comments	**Ctrl + Shift + =**	**+ + =**
Open a bug in a separate tab	**Alt + Enter**	**+ Enter**
Open a bug in a separate window	**Shift + Enter**	**+ Enter**
Copy bugs URLs to the Clipboard	**Ctrl + C**	**+ C**
Copy bugs ID and summary to the Clipboard	**Ctrl + Shift + C**	**+ + C**
Download all attachments for the selected bugs	**Control + Shift + D**	**+ + F7**

14.3 Working with Bug Table

Shortcut	Default PC Shortcut	Default Mac Shortcut
Export bugs to PDF, CSV, HTML or XML	**Ctrl + E**	**+ E**
Find text within the selected bug table	**Ctrl + Shift + F**	**+ +F**
Select columns	**Ctrl +]**	**+]**
Close tab	**Ctrl + F4**	**+ F4**
Select all	**Ctrl + A**	**+ A**
Previous/next tab	**Ctrl + PgUp/PgDn**	**+ PgUp/PgDn**

14.4 Navigation

Shortcut	Default PC Shortcut	Default Mac Shortcut
Move focus to the Navigation Area	**Ctrl + 1**	**+ 1**
Move focus to the current Bug Table	**Ctrl + 2**	**+ 2**
Move focus to the currently selected bug	**Ctrl + 3**	**+ 3**

14.5 Bugs Reorder

Open a window for reordering bugs	**Ctrl + R**	**+ J**
Move bugs one row up/down	**Ctrl + Up/Down**	**+ Up/Down**
Move bugs to the top/bottom	**Ctrl + Shift + Up/Down**	**+ + Up/Down**
Remove a bug from the ordered list	**Delete**	**Delete**

14.6 Time Tracking

Shortcut	Default PC Shortcut	Default Mac Shortcut
Open the time tracker	**Ctrl + M**	**+ I**
Open the **Edit and Publish** dialog	**Ctrl + Shift + M**	**I**
Adjust the work start/finish time	**Backspace**	**Backspace**
Start time tracking	**Ctrl + 8**	**+ 8**
Pause time tracking	**Ctrl + 9**	**+ 9**
Stop time tracking	**Ctrl + 0**	**+ 0**
Start working on the selected bug	**Ctrl + G**	**+ G**

14.7 Screenshot Editor

Shortcut	Default PC Shortcut	Default Mac Shortcut
Attach a screenshot	**Ctrl + S**	**+ + A**
Crop	**C**	**C**
Emphasize	**E**	**E**
Comment	**O**	**O**
Blur	**B**	**B**
Magnify	**M**	**M**
Select	**S**	**S**