Bjorn's August 27th₍₂₎ Implementation Sketch for Standardized Groups (bug 198541)

(1) Group Names. Unix group names on dev.eclipse.org and other eclipse.org machines will be named consistently. Either:
1. top_component
2. top_sub_component

For example:
- birt_dev : the "dev" component of the BIRT top-level project
- birt_www: the "www" component of the BIRT top-level project
- tptp_platform_dev: the "dev" component of the TPTP Platform sub-project
- tools_cdt_download: the "download" component of the Tools CDT project
- eclipse_platform_debug: the "debug" component of the Eclipse Platform project
- eclipse_platform_ui-jface: the "ui-jface" component of the Eclipse Platform project

Components names may not include "_" but may include "-".

(2) Default Groups.
1. Projects with a website on www.eclipse.org will always have a `www` component containing the subset of committers who have write-access to web site.
2. Projects with a download area on download.eclipse.org will always have a `download` component containing the subset of committers who have write-access to the download area.
3. Projects without further components will have a `dev` component containing the subset of committers who have write-access to the CVS or SVN code repository.

(3) Number of Components. Projects, at the discretion of their PMC, may have as many components as they want.

(4) Creating New Components. New components (and thus new unix groups) will be created by PMCs through a to-be-written ui box in the portal. A new component is considered a 'Major New Feature' and thus the portal will automatically queue an announcement to the membership (http://www.eclipse.org/projects/dev_process/notifying-membership.php) and, of course, to the relevant PMC and project mailing lists. The actual creation may be queued for IT efficiency (midnight or some such).
See (6) below for how we handle committers who belong to more than 16 components.

(5) Deleting Components. Components that are no longer needed may be deleted by the PMCs through a to-be-written ui box in the portal. The portal will announce the deletion in the relevant PMC and project and component mailing lists. The actual deletion may be queued for IT efficiency. Committers whose only commit rights were in the deleted component will be deactivated and, if so, sent an email explaining their loss of commit rights.

The PMC should ensure that it is following its Charter rules about only removing commit rights for committers who are inactive or troublesome. Deleting a component has the effect of removing commit rights and thus must be undertaken carefully (or with the full consent of all the active committers on the component).

(6) Electing New Committers. New Committers can be nominated and elected to components using the portal. The portal nomination and election user interface will changed to provide multi-elect:

1. When nominating a new Committer, a multi-select form will be used to select all the components for the multi-election.
2. All of the elections in the multi-election are *separate* elections and are only bundled for ui efficiency and reduced email spam. Thus candidates could/might be successfully elected to one component while being rejected/failing for another.
3. Election emails will be grouped so that the smallest number of emails will be sent to each person or list about the election. For example, the emails would say "Person X has been nominated to foo.bar.jface, foo.bar.debug, and foo.bar.www. Please go to the portal to vote on these elections."
4. The portal voting box will have two modes: grouped (the default) and separate.
   a. In grouped mode, your single vote for a candidate will apply to all of the multi-elections (that you are eligible to vote in) for the candidate. Thus, in our example above, if you were eligible to vote on the jface and www components, your single +1 vote would be treated as a +1 vote in each election, but not in the debug election as you are not eligible to vote in that election.
   b. In separate mode (click an icon in the portal user interface), you can vote separately in each of the elections for the candidate. Thus you could code +1 for the jface election and -1 for the www election if you felt that was appropriate.
5. The normal vote conclusion mechanism will apply to each election: at least three +1s and no -1s within a week, etc.
6. Any member of a component may nominate a new Committer for that component.
7. The project lead of a sub-project may nominate a new Committer for any component of that sub-project.
8. PMC members of a top-level project may nominate a new Committer for any component of that top-level project or any of the sub-projects below it.

I anticipate that the only changes most people will see in the election process are:
1. Multi-select components during the nomination
2. The election emails will say "nominated to A, B, and C" instead of just "nominated to A".

Other than that, it should look the same.

If electing a committer to a new component causes them to belong to more than 16 components, the portal will kick out an email to the webmasters to add this person to the stop-gap ACL mechanism. Once bug 157931 is fixed, this special case will go away and

committers can belong to as many components as their PMC deems appropriate (and to which they are elected).

(7) Removing Committers. Eventually there will a portal ui box for deactivating committers (should they be inactive, unruly, or simply resign). This ui box will provide simple checkboxes for deactivating from one or more components (if that is the decision of the PMC) or from all components of a project (if that is the decision of the PMC). The portal will send notification emails to the deactivated committer and to the relevant project/PMC mailing lists.

Until that portal ui box is implemented, we will use email to the emo@.

(8) Moving Files and Directories from One Unix Group to Another. Each component will "own" a set of files and directories (hence the associated unix group). Changing component ownership of a set of files and/or directories within a single Project will be done through the emo@. The EMO will seek assurance that both the former and new owners (component teams) agree to the move. This process is to ensure that changes are not forced upon teams but rather are made with the consent of the team much in the same way that new committers are elected (in other words, a PMC cannot force a team to accept a new committer: the team, as a whole, must agree to elect the new committer; when files and directories are moved, the EMO will seek to understand that the move is agreed to by all and not dictated by a few).

Change the ownership of a set of files and/or directories across Projects (top-level projects or sub-projects) must include a Contribution Questionnaire and Eclipse Legal clearance and a public Move Review.

(9) Creating New CVS/SVN Modules. (Note: by "modules", I mean "top level directories in the source repository". Because committers themselves can create sub-level directories owned by the same component as the parent directory, this (#9) only applies to new top-level directories a.k.a. modules.[1]) New CVS/SVN top-level modules will be created by filing a bug in Eclipse Foundation > Community > CVS (or SVN) requesting the new module. The bug will include the text "please create a new module foo.bar for the tptp_wishful_thinking component". This will allow the webmasters to set the group ownership and access permissions correctly.

Note: all files and directories are owned by only a single component (unix group). Although ACLs have the technical ability to provide multi-ownership, the rights of Eclipse committers do not permit this (see comment #102).

Implementation Plan

This change requires a plan and so here it is:
1. The EMO will write and test the tools necessary for this change. (Portal elections, internal database, nightly group membership updating script, etc). Target date: end of October 2007
2. The EMO will implement component membership viewing in the "lists of committers" pages. Target date: end of October 2007

---

[1] I apologize if "module" is used incorrectly here and would be happy to have someone suggest a better wording.

3. PMCs will define the set of components and the component memberships for each of their projects. The PMCs will email these sets to the EMO as a spreadsheet: column A is the developer's unix login, columns B-Z... are the components this person belongs to. Components will be listed as top.sub.component, e.g., eclipse.platform.jface-ui .
Below the list of committers, the spreadsheet will have, for each component, the set unix directories (and files, if necessary) that each component will own.
Column A is the component (top.sub.component) and columns B-Z.. are the full unix paths of the files owned by this component.
The component ownerships only need to be listed as far down the directory tree as necessary for uniqueness. Thus if /aaa/bbb/ccc is owned by the top.sub.ui component, we will naturally assume that /aaa/bbb/ccc/ddd and /aaa/bbb/ccc/eee are as well, unless specified otherwise in the spreadsheet.
Target date: end of October 2007
4. PMCs that do not provide a list of components and memberships will be assigned a default set of components (dev, www, download) with default memberships (as near as the EMO can figure out from existing unix groups).
5. The EMO will post the complete set of components and memberships on the website and send an email to the mailing lists and to the membership at large asking for any feedback. Because this assignment of committers and components has the potential to affect who belongs to each component outside of the normal election process, each project team, component team, and committer should inspect these lists carefully and raise any objections or critiques in a public discussion. Target date for posting: on or before the first Friday of November, 2007
    a. The results of any elections held during November will be added to the list.
6. Eclipse Legal will review the Committer paperwork to verify that these committers can belong to these components. Target date: end of November 2007
7. The EMO will implement all of these changes during the first two weeks of December 2007. We will place all the committers into components, turn on the new portal tools, remove all the old groups, add all the new groups, chgrp the files, turn on the automatic 'keep the groups in sync with the components' scripts, etc.

Issues Not Being Addressed By This Bug

- Components in bugzilla versus components that map to unix groups.
- The technical mechanism the webmasters use to provides groups and access lists. (see bug 157931).
- The API for projects to extract this component <-> committer mapping from the database (see bug 199501)