– Abstract –

Remote Plug-in Control in RCP Applications

RCP provisioning problem

Once an RCP-application has been developed there is a common need to update the application with new features or patches. By now Eclipse provides an update manager, which covers the whole update functionality in Eclipse. Although the update manager works pretty well, his handling is not really comfortable to inexperienced users. Furthermore they have to be somehow informed about new updates in order that they can perform them. In addition to that in some companies the update manager creates a security breach. Hence the update functionality should be covered from a regular user and be only available to admins.

Objective

The above-described problem was the driver for my diploma theses and was brought up by DESY (Deutsches Elektronen-Synchrotron), which is a national research centre.

Rather than charging the user with the update functionality the goal is to develop a remote plug-in controller, which will be handled by admins and which will be able to provision users with new features and patches without bothering them.

Approach

The idea behind the remote plug-in controller is based on two technologies: Eclipse communication framework (ECF) and an update mechanism, which is not clear so far and has to be determined. Candidates are BundleContext provided by OSGi, Eclipse 3.3 Update Manager functionality or the new Equinox P2, which will be available in Eclipse 3.4.

Basically the Eclipse communication framework is used for two tasks. It has first to manage the presence of users in order that admins can see who's online and therefore can be updated. The second task is to enable the communication between the admin machine and the remote user's computer.

Once an update command has been send to the user the update manager will handle the next steps. He will be able to update the users RCP Application and send a feedback about the success of the update to the admin.