



Take Control - Manage Your Enterprise

Imagine using your own program code for setting user authentication, permissions, and maintenance; obtaining server information; administering processes and files; setting up BBJ® applications to be autorun; and creating online copy jobs.

Sound interesting?

The **Admin API** now provides an interface for BBJ applications to accomplish tasks that could previously only be performed in the Enterprise Manager (EM). Now developers can accomplish these tasks directly in their BBJ or Java program. We'll take a closer look at these tasks by examining the capabilities of the Admin API demo.

User Functions

One of the most powerful features in the Admin API is the ability to authenticate, validate privileges of, and maintain users.

To validate a user, simply try to obtain an Admin object from the appropriate BBJ Services using the user's credentials. If the Admin object was successfully obtained, then the user is valid, otherwise the method throws



By Brian Hipple
Quality Assurance
Supervisor

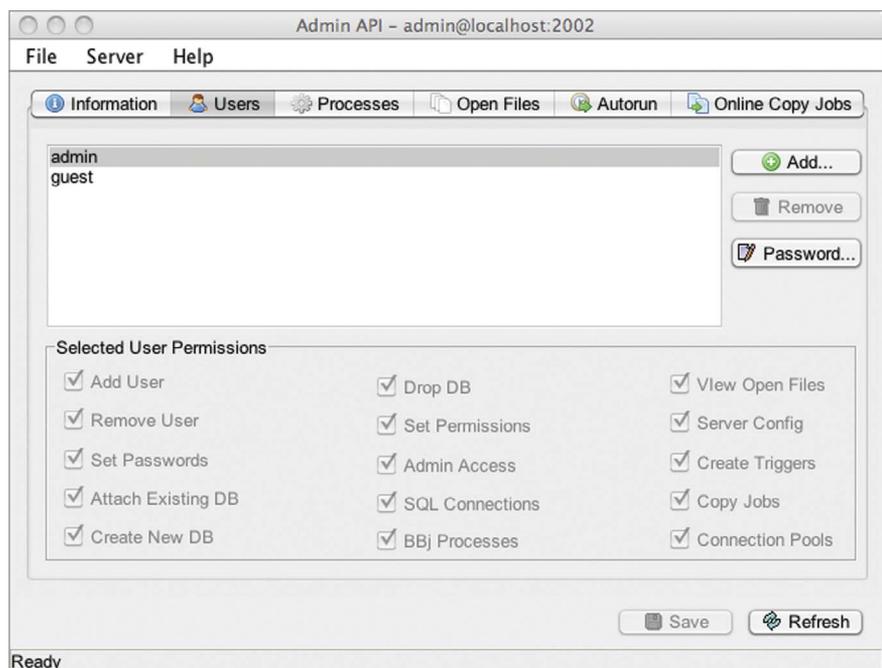


Figure 1. Admin API demo's User Management screen

an error. After obtaining the Admin object, test the user for various permissions. For example, a program could test that a user has the ability to create a database via the `getSingleUserPermissions` method before actually offering to create a database for the user. If a user has the set permission attribute, then any permission can be granted/revoked for other users. In addition, an Admin object a user obtained with the appropriate permissions can add and remove users, just like the Admin API demo does in its User Management screen (see **Figure 1**).

Server and System Information

Server information such as connection, BBJ Services, and system are available via the Admin API. Connection information includes the currently connected client user, host, and connected port. The BBJ Services information contains the revision, build date, and build ID. The system information has the OS type and version as well as providing the Java vendor, bit level, and version, as the Admin API demo System Information screen shows in **Figure 2**. >>

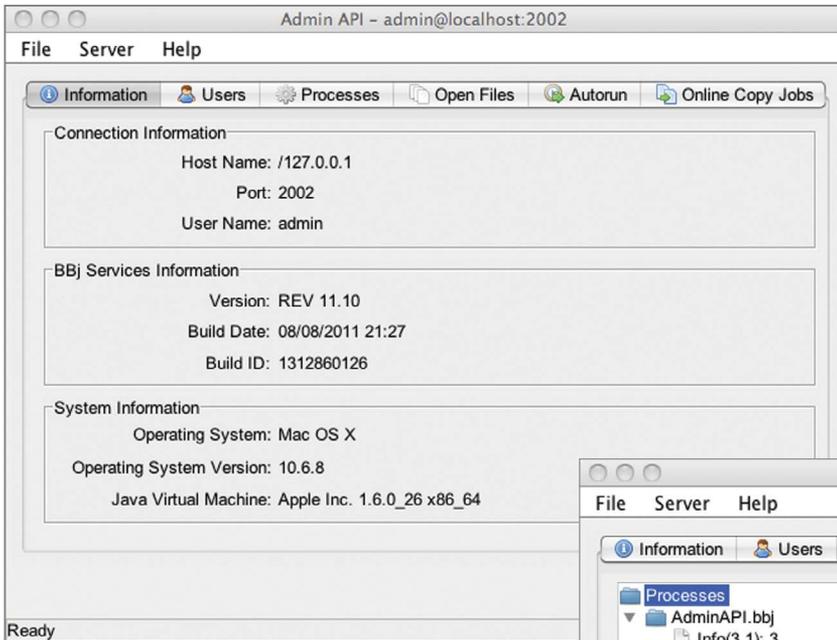


Figure 2. Admin API demo's Information screen

Processes

One of the mostly widely used features in EM is the ability to view and sometimes terminate running BBj processes. This feature is now available to BBj applications, providing process information such as program name, user, current line listing, start time, and much more. Developers can obtain the call stack, which is invaluable when debugging an application. Processes shown in **Figure 3** are terminated by calling the `BBjAdmin BBjProcess::terminate` method.

Files

The Admin API (see **Figure 4**.) provides a list of currently open files as well as an abundance of additional information such as the name, user, host, process id, extracts, advisory locks, etc. To close the files, use the `BBjAdminOpenFile::forceClose` method.

Autorun

Autorun starts BBj programs when BBj Services starts and provides a way to invoke long-running BBj applications such as a service or daemon. Default settings for autorun programs include the config file, working directory, and user. In addition, autorun programs can have custom parameters or use the default >>

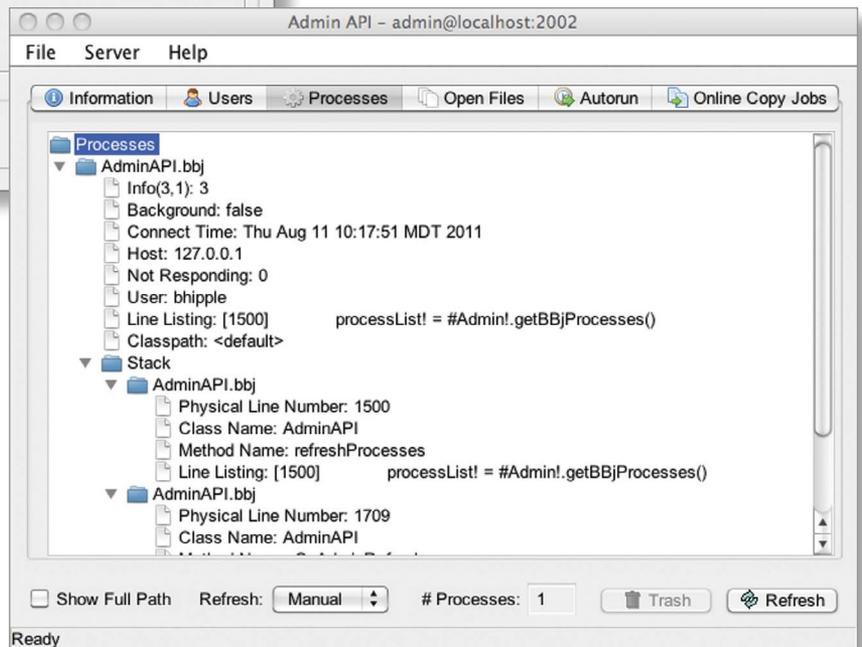


Figure 3. Admin API demo's Process screen

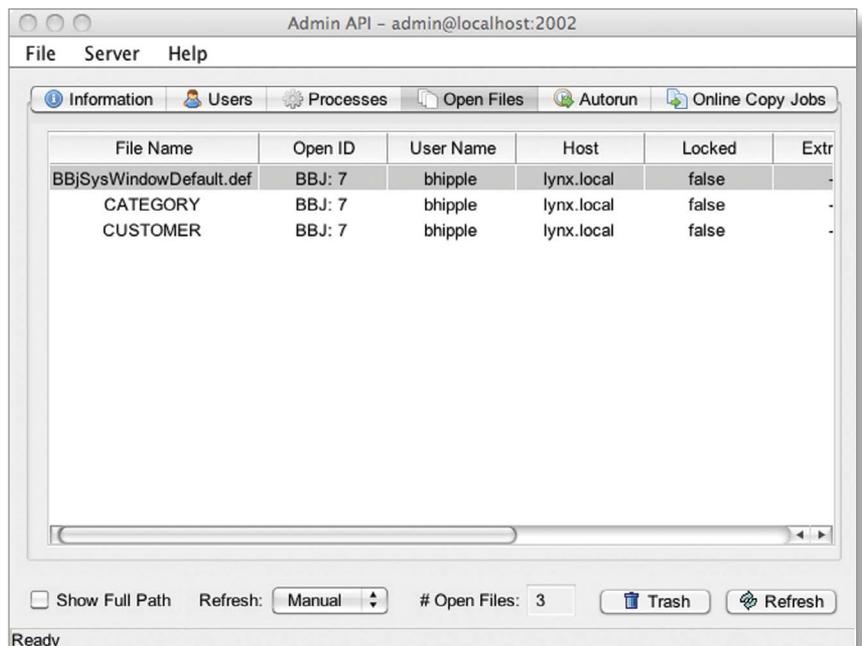


Figure 4. Admin API demo's Open files screen

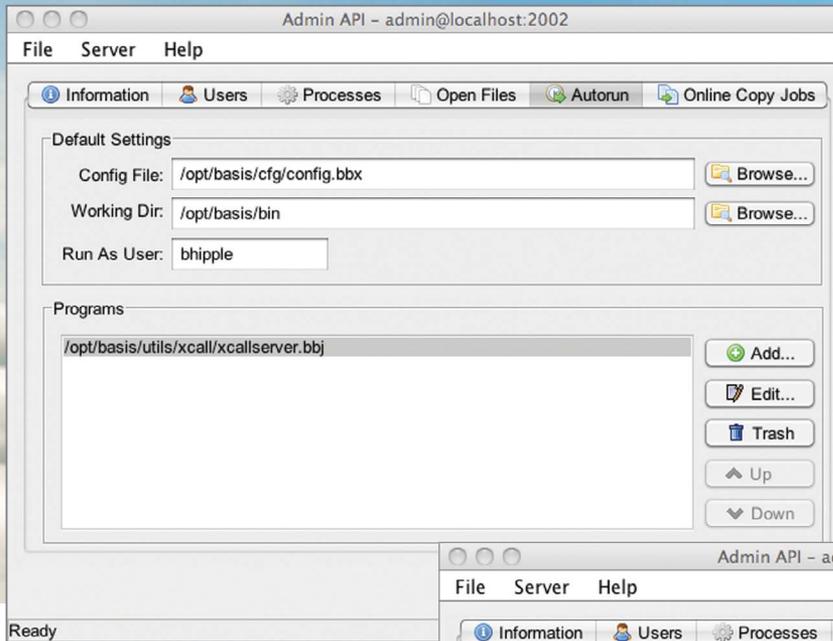


Figure 5. Admin API demo's Autorun screen

config file, working directory, and user. See **Figure 5**.

Online Copy Jobs

Online copy jobs provide a great way to create a backup of files. Use the Admin API to add or remove online copy jobs. When adding a job, first provide a name and description to refer to the job and then specify the source and destination files. Next, simply run the job and obtain a status. A running job keeps the source and destination files in sync and can be aborted or finished at any time. When the status reaches 100% as shown in **Figure 6**, the source and destination files are in sync. Then, complete the online job by invoking the Admin API.

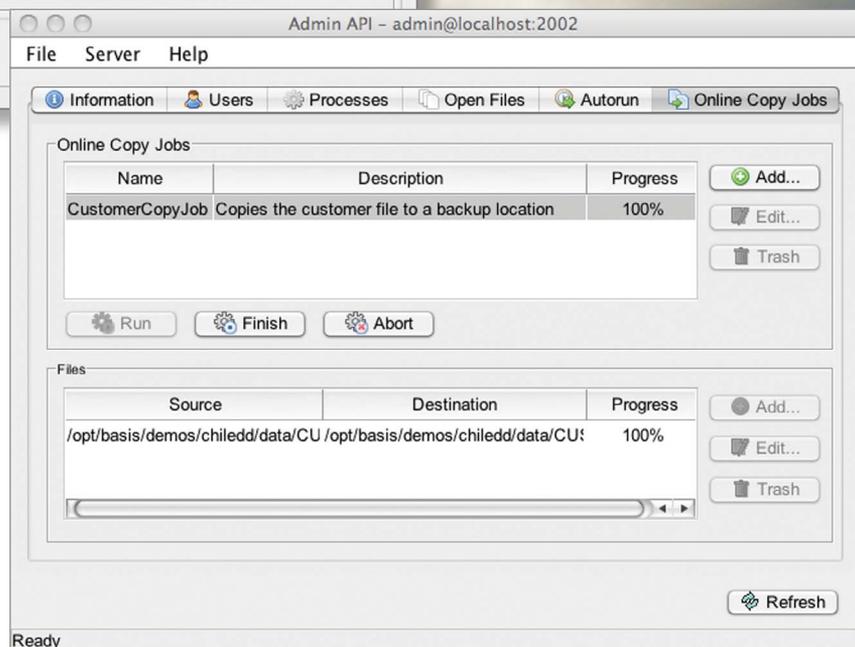


Figure 6. Admin API demo's Online Copy Jobs screen

Summary

The Admin API gives you the power to do virtually all that the Enterprise Manager does inside your program. With BASIS' introduction of BUI, developers can now perform these powerful functions in a web browser

without even having Java or BBJ installed. This means that developers can perform BBJ system administration from virtually any machine or mobile device in the world! To get started harvest the code from the Admin API demo and infuse it into your own business application today. ■



- For further information, refer to the [Admin User Credential](#)
- Install the demos and review the full source code of the BBJ Admin API demo program at <bbj install>/demos/AdminAPI/AdminAPI.bbj