Batch-mode Event Support

This web paper provides an overview of the events supported by OpenEdge® running in batch-mode.
Batch-mode Event Support

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OpenEdge running in batch mode supports the following events:

**Note:** AppServer™ servers are in essence batch mode 4GL clients, so batch mode event support also applies to AppServers.

- PROCEDURE-COMPLETE
- READ-RESPONSE
- CONNECT
- Developer events (U1 to U10) and CLOSE

There are ten miscellaneous events (U1 to U10 developer events) that have no standard meaning or action. They are reserved for a 4GL developer to use for associating a trigger with some event that only happens programatically using the APPLY 4GL statement, and which has nothing to do with a particular user action. These developer events have no built-in significance. There is also the CLOSE event which has these same characteristics. The CLOSE event only occurs when you specify it with the APPLY statement in your application.

You can use developer events or CLOSE in your application when running an OpenEdge client in batch mode. This means an application can execute the WAIT-FOR 4GL statement with a developer or CLOSE event in batch mode. Similarly, you can specify ON "U1" OF or ON "CLOSE" OF an object and then programmatically APPLY “U1” to the object to execute the code. There is no change in how OpenEdge process these events. That is, OpenEdge clients running in batch mode process these events just like non-batch clients do.

An example of when using developer events in batch mode could be useful is when you have an application that works with 4GL sockets, asynchronous AppServer requests, or asynchronous state-free AppServer requests. For instance, an application might spawn several asynchronous AppServer requests, and use one or more developer events to determine when all requests completed, as opposed to using the PROCEDURE-COMPLETE event in a loop until all requests complete. If working with a state-free AppServer, the application will get the response to the asynchronous requests out of order and you can use these developer events to better handle these situations.
The 4GL developer can also define a trigger on any developer event using the ON statement, for example ON ‘U1’ OF object, where object can be THIS-PROCEDURE or a handle of a SOCKET or ASYNC object.

You can use Events Logging (with the ProEvents.UI.Command log entry type) to trace which events the 4GL client (including batch mode) executes and in which order. For more information, see *OpenEdge Development: Debugging and Troubleshooting*. 