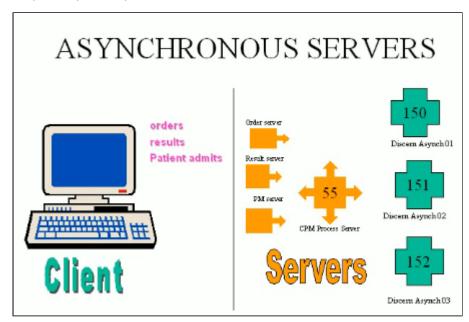
Overview

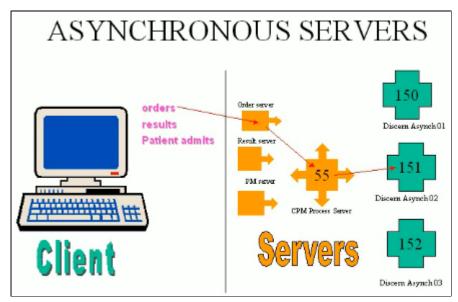
There are two different types of servers associated with rules: asynchronous servers and synchronous servers. Knowing which evoke statements are associated to which type of server will give you a better idea of how to write certain rules.

Asynchronous Servers

Asynchronous servers process in the background allowing users to continue working, place orders, enter lab results, enter patient information then 'hit submit' to notify that they are ready to submit the information.



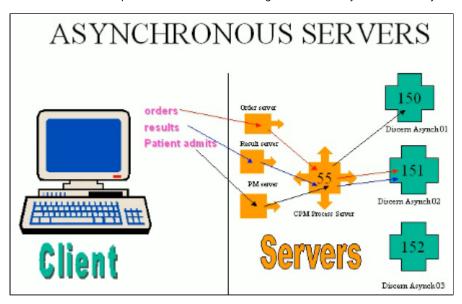
An example of an asynchronous event is the ORDER_EVENT. When an order is placed, it is packed up in a data file and sent to the order server, the information is written to the associated tables, the servers check for duplicates and perform several other functions and then send the information to a central processing (CPM) process server.



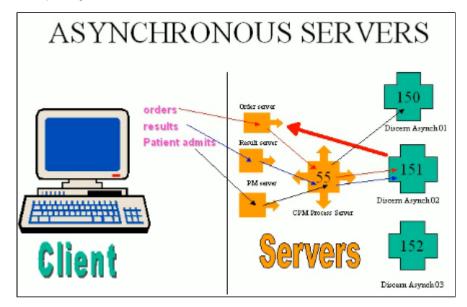
The CPM server determines whether or not Discern Explorer 'needs to know' about the order. If there is a single rule that evokes on ORDER_EVENT, the discern needs to know about it.

This entire process happens behind the scenes, instantaneously, without the user even knowing what is happening. It also allows the user to continue working as if nothing happened.

Pathnet lab results and patient information travel through servers in many of the same ways.



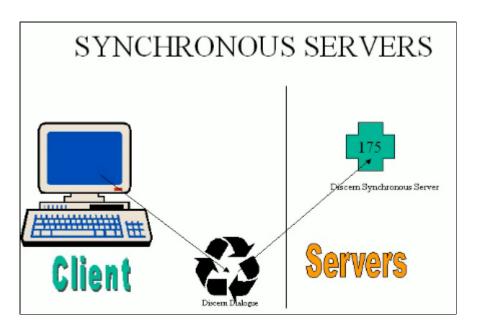
If an expert module's action is one that is processed by a server (add order, cancel order etc) Discern Expert packages the information and sends it to the corresponding server.



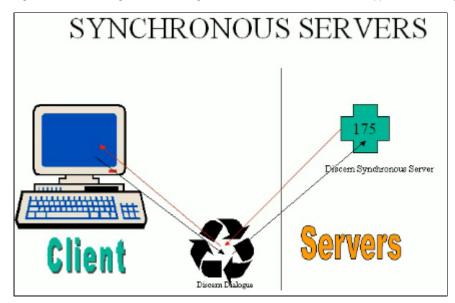
Each server has identifying numbers associated to it. For instance, CPM process server is 55 and each of the three Discern asynch servers are 150,151, and 152 respectively. Discern Async01 (150) is used to process patient events. Discern Async02 (151) and Async03 (152) are used to process order and result events.

Synchronous Servers

Synchronous server events stop the user from continuing his previous actions until a certain action has been taken. For instance, a user can be prompted with an alert, forcing him to acknowledge it before further processing takes place.



Synchronous events are intercepted by a program called Discern Dialogue, sent to the Expert server, evaluated and if something needs to get shown to the user it gets sent back through Discern Dialogue and the user waits until this all happens before they are able to continue with their workflow.



The importance in knowing what evoke events fall under which server comes into play if your looking at an evoke event that your not entirely familiar with. Knowing which server processes the event will tell you a lot of information about what that event can do. For instance, RESULT_EVENT and BB_RESULT_EVENT are both processed by one of the asynchronous servers. This prevents all of the synchronous templates from being used with these events. EKS_FLEX_A is a good example.

Why Servers need to Cycle