

# Understanding Order of Execution

The order in which actions are executed depends on the following criteria:

1. Whether an Action or Condition is set to *only* Run On Reference or on its own at one or multiple specific Run Time moments ([Runtypes](#)).
2. Whether an Action is [being depended on](#).
3. If an Action depends on other Actions or Conditions, any thereby referenced Actions and Conditions are executed before executing the respective parent Action -  
In case the execution of any referenced Action or Condition fails, a dependent Action is not executed any further.
4. **Runtype selection overrides referencing, which overrides priority which in turn overrides title.**

For when an Action will be executed is at first determined by its [Runtype](#), e.g. Before Login, After Login or At Shutdown.

**Within** each Runtype, referencing other Actions brings the execution of such referenced Actions forward (if they have not been executed already).



**NOTE:** Referencing an Action can only bring it forward within the same Runtype, but NOT from a later Runtype. If an Action was already executed at an earlier Runtype, the result can be re-used in any later Runtype(s).

The Priority of each Action then defines which Actions come before others - Actions with lower priority values are executed first.. Actions with the same Runtype and priority are executed by alphabetical order of their respective title - an Action with Title "Alpha" will be executed before an Action with title "Zebra".

## Further details

- If an Action requires the result from another Action which is supposed to be executed later during that same [Runtype](#), its execution is then brought forward.
- If however an Action requires the result from another Action which is set to run at a later Runtype, the execution of the Action referencing that later Action will fail as an Action cannot bring another Action forward across [Runtypes](#).  
On the other hand, referencing the result of an Action, which was already executed at an earlier Run Time, will work across [Runtypes](#).