Upstart: Management Tools and Runlevels

Upstart utilizes a variety of commands depending on the distribution. Generally, the commands used to manage an Upstart system are `initctl` and `update-rc.d`. To learn more about these commands, refer to the following man pages:

- `man 8 update-rc.d`
- `man 8 initctl`

Commands	Actions
`initctl start | stop | restart <name>`	Start, stop, or restart a service
`initctl status <name>`	Get service status
`initctl list`	List all available services
`update-rc.d <name> enable|disable`	Enable/Disable a service

`vi /etc/inittab:` (**If it exists**)
…
`id:<runlevel>:initdefault`
…
 	
`vi /etc/init/rc-sysinit.conf:` (**If it exists**)
…
`env DEFAULT_RUNLEVEL=<runlevel>`
…
	Set default runlevel

`runlevel` `who -r`	Show previous and current runlevel Show current runlevel
`initctl show-config`	Determine what services are configured to start on boot

Runlevels:

Traditional Runlevels	Purpose
Runlevel 0	**System Shutdown**: This runlevel will shut down services and halt the system so that it can be safely shutdown. On Solaris, a hard reset of the computer system will be necessary to restart. On Linux, the system will typically be powered down. On a normal system, this will never be set as the default level.
Runlevel 1 or S	**Single-user Mode**: This is the mode used to perform maintenance; typically the network services will be disabled in single user mode, requiring the administrator to have access to the console. This mode can also be used to recover a system that is launching a service that causes the system to become unstable or crash.
Runlevel 2 and 3	**Multi-user Mode [non-networked (2) /networked (3)]**: Traditionally this runlevel enables network services that allow for remote access. On a Solaris system, default runlevel 3 will actually launch all of the programs associated with runlevel 2, followed by those for runlevel 3. On most Linux systems, runlevel 3 is completely distinct from runlevel 2; however, on Debian Linux systems, runlevels 2 through 5 are configured the same by default.
Runlevel 4	**Extra/Unused**: Typically this runlevel is not used. On a Solaris system it is normally not even configured to be supported (though it can manually be added).
Runlevel 5	**Graphical-user Mode**: On a Solaris system this runlevel is normally used like runlevel 0, except that the system will also be powered down. On Linux systems, runlevel 5 is normally used to enable the system Graphic User Interface (GUI) for login and getting a GUI desktop.
Runlevel 6	**Reboot**: This runlevel is used to terminate existing processes and then execute a system reboot, bring the system back up in its default runlevel.