

## Oracle Solaris 11 Puppet Cheat Sheet Solaris Administration Resource Types

### IPS Packaging Resource Types

#### **boot\_environment**

*Manage Oracle Solaris Boot Environments (BEs).*

- `activate` – Activate the specified BE. Valid values are 'true', 'false'.
- `clone_be` – Create a new BE from an existing inactive BE
- `description` – Description for the new BE
- `ensure` – Whether the BE should exist. Valid values are 'present', 'absent'.
- `name` – The BE name. Defaults to title.
- `options` – Create the datasets for a new BE with specific ZFS properties. Specify options as a hash.
- `zpool` – Create the new BE in the specified zpool

#### **package**

*Manage Oracle Solaris packages.*

- `ensure` – What state the package should be in. Valid values are 'present' (also called 'installed'), 'absent', 'held', 'latest'.
- `name` – The package name. Defaults to title.

#### **pkg\_facet**

*Manage Oracle Solaris package facets.*

- `ensure` – Whether the package facet should exist. Valid values are 'present', 'absent'.
- `name` – The facet name. Defaults to title.
- `value` – The value of the facet. Values can match 'true', 'false', 'none'.

#### **pkg\_variant**

*Manage Oracle Solaris package variants.*

- `ensure` – Whether the package facet should exist. Valid values are 'present', 'absent'.
- `name` – The variant name. Defaults to title.
- `value` – The value of the variant.

#### **pkg\_publisher**

*Manage Oracle Solaris package publishers.*

- `enable` – Enable the publisher. Valid values are 'true', 'false'.
- `ensure` – Whether the package media should exist. Valid values are 'present', 'absent'.
- `name` – The publisher name. Defaults to title.
- `origin` – Which origin (URI) to set. For multiple origins, specify them as a list.
- `proxy` – Use the specified web proxy URI to retrieve content for the specified origin or mirror.
- `searchafter` – Set the publisher after the specified publisher in the search order.
- `searchbefore` – Set the publisher before the specified publisher in the search order.
- `searchfirst` – Set the publisher first in the search order. Valid values are 'true'.
- `sslcert` – Specify the client SSL certificate.
- `sslkey` – Specify the client SSL key.
- `sticky` – Set the publisher as 'sticky'. Valid values are 'true', 'false'.

#### **pkg\_mediator**

*Manage Oracle Solaris package mediators.*

- `ensure` – Whether the package media should exist. Valid values are 'present', 'absent'.
- `implementation` – The implementation of the mediated interface to use.
- `name` – The mediator name. Defaults to title.
- `value` – The value of the mediated interface to use.

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## SMF Services Resource Types

### service

*Manage SMF services.*

- `enable` – Whether the service should be enabled to start at boot. Valid values are 'true', 'false'
- `ensure` – What state the service should be in. Valid values are 'running', 'stopped'.
- `name` – The service name. Defaults to title.
- `manifest` – Specify a path to an SMF manifest that can be imported if the service doesn't already exist

### svccfg

*Manage SMF service properties.*

- `ensure` – What state the package should be in. Valid values are 'present' (also called 'installed'), 'absent', 'held', 'latest'.
- `fmri` – SMF service FMRI to manipulate.
- `name` – The symbolic name for properties to manipulate. This name is used for human reference only.
- `property` – Name of property (includes SMF property group and property).
- `type` – Type of property
- `value` – Value of property

## Zone Virtualization Resource Types

### zone

*Manage Oracle Solaris zones.*

- `archive` – The archive file containing an archived zone.
- `archived_zonename` – The archived zone to configure and install.
- `clone` – Instead of installing the zone, clone it from another zone.
- `config_profile` – Path to the `config_profile` to use to configure a solaris zone. This is set when providing a `sysconfig` profile instead of running the `sysconfig` SCI tool on first boot of the zone.

- `ensure` – The running state of the zone. Valid values are 'absent', 'configured', 'installed', 'running'.
- `install_args` – Arguments to the 'zoneadm' install command. This can be used to create branded zones. `name` – The name of the zone.
- `sysidcfg` – The text to go into the 'sysidcfg' file when the zone is first booted (used in the creation of Oracle Solaris 10 zones).
- `zonecfg_export` – Contains the zone configuration information. This can be passed in the form of a file generated by the `zonecfg` command, in the form of a template, or a string.

## ZFS Data Management Resource Types

### zpool

*Manage ZFS storage pools (zpools).*

- `disk` – The disk(s) for this pool. Can be an array or a space separated string.
- `ensure` – The basic property that the resource should be in. Valid values are 'present', 'absent'.
- `log` – Log disks for this pool. This type does not currently support mirroring of log disks.
- `mirror` – List of all the devices to mirror for this pool. Each mirror should be a space separated string. For example, `mirror => ["disk1 disk2", "disk3 disk4"]`,
- `pool` – The name for this pool. Defaults to title.
- `raid_parity` – Determines parity when using the 'raidz' parameter.
- `raidz` – List of all the devices to raid for this pool. Should be an array of space separated strings. For example, `raidz => ["disk1 disk2", "disk3 disk4"]`,
- `spare` – Spare disk(s) for this pool.

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### zfs

#### Manage ZFS datasets.

- `aclinherit` – The `aclinherit` property. Valid values are 'discard', 'noallow', 'restricted', 'passthrough', 'passthrough-x'.
- `aclmode` – The `aclmode` property. Valid values are 'discard', 'groupmask', 'passthrough'.
- `atime` – The `atime` property. Valid values are 'on', 'off'.
- `canmount` – The `canmount` property. Valid values are 'on', 'off', 'noauto'.
- `checksum` – The `checksum` property. Valid values are 'on', 'off', 'fletcher2', 'fletcher4', 'sha256'.
- `compression` – The `compression` property. Valid values are 'on', 'off', 'lzjb', 'gzip', 'gzip-[1-9]', 'zle'.
- `copies` – The `copies` property. Valid values are '1', '2', '3'.
- `dedup` – The `dedup` property. Valid values are 'on', 'off'.
- `devices` – The `devices` property. Valid values are 'on', 'off'.
- `ensure` – The state of the ZFS dataset. Valid values are 'present', 'absent'.
- `exec` – The `exec` property. Valid values are 'on', 'off'.
- `logbias` – The `logbias` property. Valid values are 'latency', 'throughput'.
- `mountpoint` – The `mountpoint` property. Valid values are '<path>', 'legacy', 'none'.
- `name` – The full name for this filesystem (including the zpool).
- `nbmand` – The `nbmand` property. Valid values are 'on', 'off'.
- `primarycache` – The `primarycache` property. Valid values are 'all', 'none', 'metadata'.
- `quota` – The `quota` property. Valid values are '<size>', 'none'.
- `readonly` – The `readonly` property. Valid values are 'on', 'off'.
- `recordsize` – The `recordsize` property. Valid values are powers of two between 512 and 128k.
- `refquota` – The `refquota` property. Valid values are '<size>', 'none'.
- `refreservation` – The `refreservation` property. Valid values are '<size>', 'none'.
- `reservation` – The `reservation` property. Valid values are '<size>', 'none'.
- `secondarycache` – The `secondarycache` property. Valid values are 'all', 'none', 'metadata'.
- `setuid` – The `setuid` property. Valid values are 'on', 'off'.
- `shareiscsi` – The `shareiscsi` property. Valid values are 'on', 'off', 'type=<type>'.
- `sharenfs` – The `sharenfs` property. Valid values are 'on', 'off', share (1M) options.
- `sharesmb` – The `sharesmb` property. Valid values are 'on', 'off', sharemgr (1M) options.
- `snappdir` – The `snappdir` property. Valid values are 'hidden', 'visible'.
- `version` – The `version` property. Valid values are '1', '2', '3', '4', 'current'.
- `volsize` – The `volsize` property. Valid values are '<size>'.
- `vscan` – The `vscan` property. Valid values are 'on', 'off'.
- `xattr` – The `xattr` property. Valid values are 'on', 'off'.
- `zoned` – The `zoned` property. Valid values are 'on', 'off'.

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## Networking Resource Types

### vnic

*Manage the configuration of Oracle Solaris Virtual NICs (VNICs).*

- **ensure** – What state the VNIC should be in. Valid values are 'present', 'absent'.
- **lower\_link** – The name of the physical datalink over which the VNIC is operating.
- **mac\_address** – Sets the VNIC's MAC address based on the specified value.
- **name** – The name of the VNIC. Defaults to title.
- **temporary** – Optional parameter that specifies that the VNIC is temporary and will last until the next reboot. Valid values are 'true', 'false'.

### etherstub

*Manage the configuration of Oracle Solaris etherstubs.*

- **ensure** – What state the etherstub should be in. Valid values are 'present', 'absent'.
- **name** – The name of the etherstub. Defaults to title.
- **Temporary** – Optional parameter that specifies that the etherstub is temporary and will last until the next reboot. Valid values are 'true', 'false'.

### link\_properties

*Manage Oracle Solaris link properties.*

- **ensure** – What state the link should be in. Valid values are 'present', 'absent'.
- **link** – The name of the link.
- **properties** – A hash table of propname=propvalue entries to apply to the link.
- **temporary** – Optional parameter that specifies that the IP interface is temporary. Temporary interfaces last until the next reboot. Valid values are 'true', 'false'.

### ip\_interface

*Manage the configuration of Oracle Solaris IP interfaces.*

- **ensure** – The state of the IP interface. Valid values are 'present', 'absent'.
- **name** – The name of the IP interface.
- **temporary** – Optional parameter that specifies that the IP interface is temporary. Temporary interfaces last until the next reboot. Valid values are 'true', 'false'.

### address\_object

*Manage the configuration of Oracle Solaris address objects.*

- **address** – A literal IP address or a hostname corresponding to the local end-point. An optional prefix length may be specified. Only valid with an address\_type of 'static'.
- **address\_type** – The type of address object to create. Valid values are 'static', 'dhcp', 'addrconf'.
- **down** – Specifies that the configured address should be marked down. Only valid with an address\_type of 'static'. Valid values are 'true', 'false'.
- **enable** – Specifies the address object should be enabled or disabled. Valid values are 'true', 'false'.
- **ensure** – The basic property that the resource should be in. Valid values are 'present', 'absent'.
- **hostname** – Specifies the hostname to which the client would like the DHCP server to map the client's leased IPv4 address. Only valid with an address\_type of 'dhcp'.
- **interface\_id** – Specifies the local interface ID to be used for generating auto-configured addresses. Only valid with an address\_type of 'addrconf'.
- **remote\_address** – A literal IP address or a hostname corresponding to an optional remote end-point. An optional prefix length may be specified. Only valid with an address\_type of 'static'.
- **remote\_interface\_id** – Specifies an optional remote interface ID to be used for generating auto-configured addresses. Only valid with an address\_type of 'addrconf'.
- **seconds** – Specifies the amount of time in seconds to wait until the operation completes. Only valid with an address\_type of 'dhcp'. Valid values are a numerical value in seconds or 'forever'.
- **stateful** – Specifies if stateful auto-configuration should be enabled or not. Valid values are 'yes', 'no'.
- **stateless** – Specifies if stateless auto-configuration should be enabled or not. Valid values are 'yes', 'no'.
- **temporary** – Optional parameter that specifies that the address object is temporary. Temporary aggregation links last until the next reboot. Valid values are 'true', 'false'.

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## **interface\_properties**

*Manage Oracle Solaris interface properties.*

- **ensure** – Valid values are 'present'.
- **interface** – The name of the interface. Defaults to title.
- **properties** – A hash table of propname=propvalue entries to apply to an interface.
- **temporary** – Optional parameter that specifies changes to the interface are temporary. Changes last until the next reboot. Valid values are 'true', 'false'.

## **address\_properties**

*Manage Oracle Solaris address object properties.*

- **address** – The name of the address object. Defaults to title.
- **ensure** – Valid values are 'present'.
- **properties** – A hash table of propname=propvalue entries to apply to an address object.
- **temporary** – Optional parameter that specifies changes to the address object are temporary. Changes last until the next reboot. Valid values are 'true', 'false'.

## **protocol\_properties**

*Manage Oracle Solaris protocol properties.*

- **ensure** – What state the etherstub should be in. Valid values are 'present', 'absent'.
- **properties** – A hash table of propname=propvalue entries to apply to a protocol.
- **protocol** – The name of the protocol. Defaults to title.
- **Temporary** – Optional parameter that specifies changes to the protocol are temporary. Changes last until the next reboot. Valid values are 'true', 'false'.

## **link\_aggregation**

*Manage the configuration of Oracle Solaris link aggregations.*

- **address** – Specifies a fixed unicast hardware address to be used for the aggregation.
- **ensure** - The basic property that the resource should be in. Valid values are 'present', 'absent'.
- **lacmode** – Specifies whether LACP should be used and, if used, the mode in which it should operate. Valid values are 'off', 'active', 'passive'.
- **lacptimer** – Specifies the LACP timer value. Valid values are 'short', 'long'.
- **lower\_links** – Specifies an array of links over which the aggregation is created.
- **mode** – Specifies which mode to set. Valid values are 'trunk', 'dImp'.
- **name** – The name of the link aggregation
- **policy** – Specifies the port selection policy to use for load spreading of outbound traffic
- **temporary** – Optional parameter that specifies that the aggregation is temporary. Temporary aggregation links last until the next reboot. Valid values are 'true', 'false'.

## **ipmp\_interface**

*Manage the configuration of Oracle Solaris IPMP interfaces.*

- **ensure** - The basic property that the resource should be in. Valid values are 'present', 'absent'.
- **interface** – An array of interface names to use for the IPMP interface.
- **name** – The name of the interface.
- **temporary** – Optional parameter that specifies that the IPMP interface is temporary. Temporary interfaces last until the next reboot. Valid values are 'true', 'false'.

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### ***ip\_tunnel***

*Manage Oracle Solaris IP Tunnel links.*

- **ensure** – The basic property that the resource should be in. Valid values are 'present', 'absent'.
- **local\_address** – IP address or hostname corresponding to the local tunnel address.
- **name** – The name of the IP Tunnel link.
- **remote\_address** – IP address or hostname corresponding to the remote tunnel address.
- **temporary** – Optional parameter that specifies that the IP tunnel is temporary. Temporary IP tunnels last until the next reboot. Valid values are 'true', 'false'.
- **tunnel\_type** – Specifies the type of tunnel to be created. Valid values are 'ipv4', 'ipv6', '6to4'.

### ***vni\_interface***

*Manage the configuration of Oracle Solaris VNI interfaces.*

- **ensure** – The basic state that the resource should be in. Valid values are 'present', 'absent'.
- **name** – The name of the VNI interface.
- **temporary** – Optional parameter that specifies changes to the VNI interface are temporary. Changes last until the next reboot. Valid values are 'true', 'false'.

### ***solaris\_vlan***

*Manage the configuration Oracle Solaris VLAN links.*

- **ensure** – The basic state that the resource should be in. Valid values are 'present', 'absent'.
- **force** – Optional parameter to force the creation of the VLAN link. Valid values are 'true', 'false'.
- **lower\_link** – Specifies the Ethernet link over which the VLAN is created.
- **name** – The VLAN name.
- **temporary** – Optional parameter that specifies changes to the VLAN is temporary. Changes last until the next reboot. Valid values are 'true', 'false'.
- **vlanid** – VLAN link ID.

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## Naming Service Resource Types

### **dns**

*Manage the configuration of the DNS client for Oracle Solaris.*

- **domain** – The local domain name.
- **name** – The symbolic name for the DNS client settings to use. This name is used for human reference only.
- **nameserver** – The IP address(es) the resolver is to query. A maximum of 3 IP addresses may be specified. Specify multiple IP addresses as an array.
- **options** – Set internal resolver variables. Valid values are 'debug', 'ndots:n', 'timeout:n', 'retrans:n', 'attempts:n', 'retry:n', 'rotate', 'no-check-names', 'inet6'. For values with 'n', specify 'n' as an integer. Specify multiple options as an array.
- **search** – The search list for host name lookup. A maximum of 6 search entries may be specified. Specify multiple search entries as an array.
- **sortlist** – Addresses returned by gethostbyname() to be sorted. Entries must be specified in IP 'slash notation'. A maximum of 10 sortlist entries may be specified. Specify multiple entries as an array.

### **nis**

*Manage the configuration of the NIS client for Oracle Solaris.*

- **Name** – The symbolic name for the NIS domain and client settings to use. This name is used for human reference only.
- **Securenets** – Entries for `/var/yp/securenets`. Each entry must be a hash. The first element in the hash is either a host or a netmask. The second element must be an IP network address. Specify multiple entries as separate entries in the hash.
- **use\_broadcast** – Send a broadcast datagram requesting needed bind information for a specific NIS server. Valid values are 'true', 'false'.
- **use\_ypsetme** – Only allow root on the client to change the binding to a desired server. Valid values are 'true', 'false'.
- **ypservers** – The hosts or IP addresses to use as NIS servers. Specify multiple entries as an array.

### **nsswitch**

*Name service switch configuration for Oracle Solaris.*

- **Alias** – The alias database lookup override.
- **auth\_attr** – The auth\_attr database lookup override.
- **automount** – The automount database lookup override.
- **bootparam** – The bootparam database lookup override.
- **default** – The default configuration entry.
- **ether** – The ether database lookup override.
- **group** – The group database lookup override.
- **host** – The host database lookup override.
- **name** – The symbolic name for the nsswitch settings to use. This name is used for human reference only.
- **Netgroup** – The netgroup database lookup override.
- **Netmask** – The netmask database lookup override.
- **Network** – The network database lookup override.
- **Password** – The password database lookup override.
- **prof\_attr** – The prof\_attr database lookup override.
- **project** – The project database lookup override.
- **publickey** – The publickey database lookup override.
- **rpc** – The rpc database lookup override.
- **service** – The service database lookup override.
- **sudoer** – The sudoer database lookup override. Used with sudo only.
- **tnrhdb** – The tnrhdb database lookup override. Requires trusted extensions.
- **tnrhtp** – The tnrhtp database lookup override. Requires trusted extensions.

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## ldap

*Manage the configuration of the LDAP client for Oracle Solaris.*

- `admin_bind_dn` – The Bind Distinguished Name for the administrator identity that is used for shadow information update.
- `admin_bind_passwd` – The administrator password.
- `attribute_map` – A mapping from an attribute defined by a service to an attribute in an alternative schema. Specify multiple mappings as an array.
- `authentication_method` – The default authentication method(s). Specify multiple methods as an array. Valid values are 'none', 'simple', 'sas//CRAM-MD5', 'sas//DIGEST-MD5', 'sas//GSSAPI', 'tls:simple', 'tls:sas//CRAM-MD5', 'tls:sas//DIGEST-MD5'.
- `bind_dn` – An entry that has read permission for the requested database. Specify multiple entries as an array.
- `bind_passwd` – The password to be used for authenticating the bind DN.
- `bind_time_limit` – The maximum number of seconds a client should spend performing a bind operation.
- `credential_level` – The credential level the client should use to contact the directory. Valid values are 'anonymous', 'proxy', 'self'.
- `enable_shadow_update` – Specify whether the client is allowed to update shadow information. Valid values are 'true', 'false'.
- `follow_referrals` – The referral setting. Valid values are 'true', 'false'.
- `host_certpath` – The location of the certificate files.
- `name` – The symbolic name for the LDAP client settings to use. This name is used for human reference only.
- `objectclass_map` – A mapping from an objectclass defined by a service to an objectclass in an alternative schema. Specify multiple mappings as an array.
- `preferred_server_list` – LDAP server(s) to contact before any servers listed in `default_server_list`.
- `profile` – The LDAP profile name.
- `profile_ttl` – The TTL value in seconds for the client information.
- `search_base` – The default search base DN.
- `search_scope` – The default search scope for the client's search operations. Valid values are 'base', 'one', 'sub'.
- `search_time_limit` – The maximum number of seconds allowed for an LDAP search operation.
- `server_list` – LDAP server names or addresses. Specify multiple servers as an array.
- `service_authentication_method` – The authentication method to be used by a service. Specify multiple methods as an array.
- `service_credential_level` – The credential level to be used by a service. Value values are 'anonymous', 'proxy'.



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