# PUPPET

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**1. What is the primary configuration language used by Puppet manifests?**

A. JSON
B. Puppet DSL
C. YAML
D. Ruby scripts only

**Answer: B**

Explanation: Puppet manifests are written in the Puppet Domain Specific Language (DSL), a declarative language with Ruby-like syntax tailored for infrastructure definitions.

**2. Which command applies a Puppet manifest locally without contacting the master?**

A. puppet agent --test
B. puppet apply manifest.pp
C. puppet master --apply
D. puppet run manifest.pp

**Answer: B**

Explanation: ‘puppet apply‘ evaluates manifests on the local machine using the current settings and facts, allowing standalone execution without a Puppet server.

**3. Where are Puppet modules typically stored on a master by default?**

A. /etc/puppetlabs/code/modules
B. /var/lib/puppet/modules
C. /opt/puppet/modules
D. /usr/share/puppet/modules

**Answer: A**

Explanation: The default environment path places modules under ‘/etc/puppetlabs/code/modules‘, where environment-specific ‘modules/‘ directories live.

**4. What is the purpose of Puppet classes?**

A. Define collections of resources for reuse
B. Manage network interfaces
C. Store Hiera data
D. Configure agents

**Answer: A**

Explanation: Classes group resources into reusable components that can be declared in manifests or assigned via classification.

**5. Which Puppet resource type manages packages?**

A. package

B. pkg
C. install
D. module
**Answer: A**
Explanation: The built-in ‘package‘ type abstracts operating system package managers, ensuring specific packages are installed or removed.

### 6. What does the command ‘puppet agent -t‘ do?

A. Tests module syntax
B. Runs Puppet agent in one-off mode retrieving catalog from master
C. Compiles catalog on master
D. Generates certificate
**Answer: B**
Explanation: ‘puppet agent -t‘ (test mode) forces an immediate run, fetching the catalog from the Puppet server and applying it to the node.

### 7. Which tool provides role- and profile-based classification in Puppet Enterprise?

A. Node classifier (Console)
B. Hiera
C. Bolt
D. PuppetDB
**Answer: A**
Explanation: Puppet Enterprise includes the console’s node classifier, offering a GUI to assign roles, classes, and parameters to nodes.

### 8. What is PuppetDB used for?

A. Store and query collected data and catalogs
B. Manage modules
C. Provide GUI
D. Execute Bolt plans
**Answer: A**
Explanation: PuppetDB stores facts, catalogs, and reports, enabling complex queries and driving exported resources across nodes.

### 9. How do you declare a class in a manifest?

A. include classname
B. class { ’classname’: }
C. Both include and resource-like declarations
D. use classname
**Answer: C**
Explanation: Puppet allows including classes with ‘include‘ or declaring them like resources for parameterized usage, offering flexibility in manifests.

### 10. Which file defines metadata for a Puppet module?

A. metadata.json
B. metadata.yaml
C. Modulefile
D. module.rb

**Answer: A**

Explanation: ‘metadata.json‘ contains module name, version, dependencies, and compatibility data, required for the Puppet Forge and module tooling.

### 11. What is Hiera in Puppet?

A. Hierarchical data lookup system for separating data from code
B. Module packaging tool
C. GUI console
D. Compliance scanner

**Answer: A**

Explanation: Hiera lets you store configuration data in hierarchical backends (YAML, JSON, etc.), allowing manifests to remain data-free and reusable.

### 12. Which file configures Puppet settings globally?

A. puppet.conf
B. puppet.ini
C. puppet.cfg
D. settings.yaml

**Answer: A**

Explanation: ‘puppet.conf‘ governs settings for agent and server components, specifying environment directories, server addresses, and more.

### 13. What command validates Puppet manifest syntax?

A. puppet parser validate site.pp
B. puppet manifest check site.pp
C. puppet lint site.pp
D. puppet verify site.pp

**Answer: A**

Explanation: ‘puppet parser validate‘ ensures manifests are syntactically correct; puppet-lint adds style checks on top.

### 14. How can you order resource execution in Puppet?

A. Using ‘->‘ chaining arrow or before/require metaparameters
B. Using run_list
C. Using include order
D. Using manifest numbering

**Answer: A**

Explanation: Relationship metaparameters (‘before‘, ‘require‘, ‘notify‘, ‘subscribe‘) and chaining arrows enforce dependency ordering between resources.

### 15. Which component stores facts collected by Facter?

A. PuppetDB
B. Hiera
C. Puppet master
D. Bolt

**Answer: A**

Explanation: When configured, PuppetDB persists node facts collected by Facter, making them searchable and available for exported resources.

### 16. What is a node definition in Puppet?

A. Manifest block matching specific node names or patterns
B. Module metadata
C. Hiera lookup
D. Puppet agent install

**Answer: A**

Explanation: Node definitions specify classes and resources for particular nodes or regex patterns, allowing per-node overrides.

### 17. How do you install a module from Puppet Forge?

A. puppet module install author-modulename
B. puppet forge install module
C. puppet module get modulename
D. puppet install module author/modulename

**Answer: A**

Explanation: ‘puppet module install‘ pulls modules from Forge into the module path, optionally specifying namespaces like ‘puppetlabs-apache‘.

### 18. Which Puppet resource manages file content from templates?

A. file { ...: content => template(’module/file.erb’) }
B. template resource
C. config resource
D. manifest resource

**Answer: A**

Explanation: The ‘file‘ resource can use the ‘template()‘ function to render ERB templates and set file content dynamically based on variables.

### 19. What is the default frequency of Puppet agent runs?

A. Every 10 minutes
B. Every 30 minutes
C. Every 60 minutes

D. Once per day

**Answer: B**

Explanation: By default, Puppet agent has a 30-minute run interval, configurable via ‘runinterval‘ in puppet.conf.

### 20. Which command enables detailed debugging output for Puppet agent?

A. puppet agent -t --debug

B. puppet agent -d

C. puppet agent --verbose

D. puppet agent --trace

**Answer: A**

Explanation: Adding ‘--debug‘ to ‘puppet agent -t‘ produces verbose logs helpful for troubleshooting catalog application.

### 21. What does Facter provide?

A. System facts that Puppet uses in manifests

B. Module testing

C. Policy enforcement

D. Graphical UI

**Answer: A**

Explanation: Facter collects facts such as OS, memory, and IP addresses, which Puppet references in manifests for conditional logic.

### 22. How do you ensure a file resource is removed?

A. ensure => absent

B. ensure => deleted

C. ensure => remove

D. action => delete

**Answer: A**

Explanation: Setting ‘ensure => absent‘ on a ‘file‘ (or package/service) resource tells Puppet to remove it if present.

### 23. Which Puppet metaparameter sets dependency on another resource?

A. require

B. before

C. subscribe

D. notify

**Answer: A**

Explanation: ‘require‘ ensures that the referenced resource is managed before the current one, enforcing order based on dependency.

### 24. What is the effect of ‘notify‘ metaparameter?

A. Triggers another resource to refresh when the notifying resource changes

B. Sends email
C. Logs warning
D. Runs command immediately
**Answer: A**
Explanation: ‘notify‘ establishes a relationship where changes in one resource cause the notified resource to refresh, often used with ‘service‘ resources.

### 25. How are conditional statements written in Puppet?

A. if condition { } elsif { } else { }
B. condition ? {} : {}
C. when condition { }
D. case { } only
**Answer: A**
Explanation: Puppet’s ‘if/elsif/else‘ syntax mirrors Ruby and allows branching logic within manifests; case statements are also supported separately.

### 26. What does ‘puppet config print confdir‘ output?

A. Path to Puppet configuration directory
B. Config contents
C. Module directory
D. Log directory
**Answer: A**
Explanation: The command prints the current value of ‘confdir‘, showing where puppet.conf and related files reside for the given user/component.

### 27. Which command lists installed modules?

A. puppet module list
B. puppet module show
C. puppet module status
D. puppet list modules
**Answer: A**
Explanation: ‘puppet module list‘ scans the module path and displays installed modules and their versions, indicating from which path they load.

### 28. What is the role of ‘environment.conf‘?

A. Configure environment-specific settings like modulepath and manifest
B. Configure agent certificates
C. Manage Hiera hierarchy
D. Configure PuppetDB
**Answer: A**
Explanation: Each environment can define ‘environment.conf‘ to tailor module paths, manifest directories, and config version scripts.

### 29. How can you declare a defined resource type?

A. Using ‘define‘ to create new resource definitions
B. Using class
C. Using module
D. Using node
**Answer: A**
Explanation: Defined resource types (‘define‘) encapsulate reusable resource blocks that require parameters, similar to functions for resources.

### 30. Which statement about Puppet environments is correct?

A. Allow multiple versions of code to be served for different nodes
B. Only available in Puppet Enterprise
C. Replace modules
D. Manage user accounts
**Answer: A**
Explanation: Environments segregate manifests and modules, enabling dev/test/prod code bases and preventing code changes from affecting all nodes at once.

### 31. What is a Puppet catalog?

A. Compiled list of resources and relationships stored on master delivered to agent
B. Module repository
C. Hiera data set
D. Bolt inventory
**Answer: A**
Explanation: The catalog is the manifest compiled with node data, containing the desired state applied by the agent on each run.

### 32. Which command prints the compiled catalog without applying it?

A. puppet agent -t --noop
B. puppet agent --catalog-only
C. puppet preview
D. puppet apply --noop
**Answer: A**
Explanation: ‘--noop‘ performs a dry run, showing what changes would occur without enforcing them, similar to check mode.

### 33. What does ‘subscribe‘ metaparameter do?

A. Monitors another resource and refreshes if it changes
B. Creates dependency order
C. Notifies user
D. Schedules run
**Answer: A**

Explanation: ‘subscribe‘ is the inverse of ‘notify‘, causing the current resource to refresh when the subscribed resource changes.

### 34. How do you set file ownership in Puppet?

A. file { ’/path’: owner => ’user’, group => ’group’ }
B. file { ’/path’: chown => ’user:group’ }
C. file { ’/path’: ensure => owner(user) }
D. file { ’/path’: ensure => ’owned’ }
**Answer: A**
Explanation: The ‘file‘ resource accepts ‘owner‘, ‘group‘, and ‘mode‘ attributes to manage file permissions declaratively.

### 35. Which directory contains environment manifests by default?

A. environments/<env>/manifests
B. manifests/env
C. site/manifests
D. env/manifests
**Answer: A**
Explanation: In the directory environment layout, manifests live under ‘environments/{env}/manifests‘, typically with a ‘site.pp‘.

### 36. How do you limit Puppet agent run to subset of classes?

A. Use ‘puppet agent -t --tags class1,class2‘
B. Use ‘puppet agent --limit‘
C. Use ‘puppet agent -c class1‘
D. Use ‘puppet apply --only‘
**Answer: A**
Explanation: The ‘--tags‘ option filters resources by tag (class names generate tags automatically), enabling partial runs for troubleshooting.

### 37. What is a resource type alias declared with ‘resource { ’title’: alias => [’alt’] }‘ used for?

A. Provide additional references for same resource instance
B. Rename resource type
C. Create new resource
D. Manage tags
**Answer: A**
Explanation: Aliases let other resources refer to the same instance under different names, useful for cross-resource relationships.

### 38. What is the recommended way to separate code from data?

A. Use Hiera to store data, Puppet manifests for code

B. Hard-code data in manifests
C. Use modules only
D. Use external node classifiers exclusively
**Answer: A**
Explanation: Hiera keeps data external, allowing manifests to stay generic while data is layered per environment, role, or site.

### 39. How can you enforce strict variable checking?

A. Set ‘strict_variables = true‘ in puppet.conf
B. Use ‘puppet strict‘
C. Use ‘--strict‘ flag on agent
D. Use Hiera flag
**Answer: A**
Explanation: Enabling ‘strict_variables‘ causes Puppet to error when undefined variables are referenced, reducing silent typos.

### 40. Which command stops Puppet agent service on Linux systemd?

A. systemctl stop puppet
B. service puppet stop
C. Both A and B depending on system
D. puppet agent --stop
**Answer: C**
Explanation: Depending on the init system, you can use ‘systemctl‘ or ‘service‘ to control the Puppet agent service.

### 41. What is the default file extension for Puppet manifests?

A. .pp
B. .puppet
C. .rb
D. .conf
**Answer: A**
Explanation: Puppet manifests use the ‘.pp‘ extension, short for Puppet Program, and Puppet loads files accordingly.

### 42. Which built-in function merges two hashes?

A. merge(hash1, hash2)
B. hash1 + hash2
C. join(hash1, hash2)
D. append(hash1, hash2)
**Answer: A**
Explanation: The ‘merge‘ function combines key/value pairs from multiple hashes, with later hashes overriding earlier ones for duplicate keys.

### 43. How do you run Puppet in daemonized mode?

A. puppet agent --daemonize
B. puppet agent --service
C. puppet run --background
D. puppet apply --daemon

**Answer: A**

Explanation: '--daemonize' starts puppet agent as a background process that runs at intervals instead of exiting after one run.

### 44. What is the effect of 'ensure => latest' for package resource?

A. Keeps package at latest available version
B. Installs once
C. Removes package
D. Reinstalls always

**Answer: A**

Explanation: 'ensure => latest' tells Puppet to upgrade the package if a newer version exists during runs.

### 45. Which command triggers Puppet Bolt plan execution?

A. bolt plan run planname
B. puppet bolt run planname
C. bolt run planname
D. puppet plan run planname

**Answer: A**

Explanation: Bolt is invoked directly ('bolt plan run'), enabling task and plan execution without requiring the Puppet agent infrastructure.

### 46. What is the difference between 'require' and 'before'?

A. require ensures current resource runs after dependency; before ensures it runs before resource
B. require checks for file existence; before delays run
C. before triggers refresh
D. They are identical

**Answer: A**

Explanation: 'require' creates a dependency on another resource finishing first, whereas 'before' declares that the current resource must complete before the specified one.

### 47. Which command backs up current certificate on agent?

A. puppet ssl clean
B. puppet ssl regenerate
C. puppet certificate backup
D. puppet ssl save

**Answer: A**

Explanation: ‘puppet ssl clean‘ removes certificates, keys, and CSR files, effectively resetting registration so a new certificate can be requested.

### 48. What is the purpose of a Puppet report?

A. Record the outcome of agent run sent to master for auditing

B. Install packages

C. Manage modules

D. Provide user interface

**Answer: A**

Explanation: Reports summarize each run’s changes, resource statuses, and errors, stored on the master (or PuppetDB) for compliance tracking.

### 49. How do you compile a catalog without applying and view resource relationships graphically?

A. puppet agent -t --noop --graph

B. puppet graph

C. puppet describe

D. puppet apply --graph

**Answer: D**

Explanation: ‘puppet apply --graph‘ produces a DOT graph of resource relationships, useful for visualization, while still allowing no-op runs.

### 50. What is the significance of ‘site.pp‘?

A. Main manifest entry point for default environment

B. Hiera configuration

C. Module metadata

D. PuppetDB settings

**Answer: A**

Explanation: ‘site.pp‘ is the default manifest loaded for nodes in an environment if no other classification is configured, commonly including node definitions.

### 51. Which command sets environment for an agent run temporarily?

A. puppet agent -t --environment=dev

B. puppet apply --environment dev

C. puppet env dev

D. puppet config env dev

**Answer: A**

Explanation: Passing ‘--environment‘ on the agent run forces it to use a specific environment for that invocation, handy for testing changes.

### 52. What is hiera.yaml used for?

A. Define data hierarchy for Hiera lookups
B. Configure PuppetDB
C. Manage modules
D. Configure agent runs
**Answer: A**
Explanation: ‘hiera.yaml‘ declares hierarchical data layers and backends so Puppet knows how to resolve lookup keys.

### 53. How can you iterate over an array in Puppet DSL?

A. array.each |$item| { }
B. for item in array { }
C. array.map { }
D. loop array { }
**Answer: A**
Explanation: Puppet DSL supports Ruby-style ‘each‘ iterations using lambda syntax ‘|$item|‘, enabling loops within manifests.

### 54. Which resource ensures service restarts when config file changes?

A. file -> service relationship using notify/subscribe
B. service with auto_restart
C. package ensures restart
D. manifest ensures order automatically
**Answer: A**
Explanation: Using ‘notify‘ or ‘subscribe‘ links the file resource to the service, causing the service to refresh when configuration changes.

### 55. What is the Puppet Enterprise Console primarily used for?

A. GUI for node classification, reporting, and control
B. Code editing
C. Module packaging
D. Hiera management only
**Answer: A**
Explanation: The console provides role-based access, classification, run reports, and orchestrations across Puppet-managed infrastructure.

### 56. How do you store encrypted data in Hiera?

A. Use eyaml backend with public/private keys
B. Use base64 encoding
C. Use gzip
D. Use hashed values
**Answer: A**
Explanation: hiera-eyaml plugin allows encrypting data with public/private keys, keeping

secrets in version control while decrypting at runtime.

### 57. Which command clears agent certificate and requests new one?

A. puppet ssl clean && puppet agent -t
B. puppet cert regenerate
C. puppet agent --rekey
D. puppet ssl reset
**Answer: A**
Explanation: Cleaning SSL removes existing credentials, and the subsequent agent run submits a new CSR to the CA for signing.

### 58. What does ‘puppet resource user bob ensure=present‘ do?

A. Displays resource definition for user bob
B. Ensures user bob is present
C. Removes user bob
D. Lists all users
**Answer: B**
Explanation: ‘puppet resource‘ can manage resources ad hoc; specifying ‘ensure=present‘ enforces the user’s existence with default properties.

### 59. How can you list facter facts?

A. facter
B. puppet facts show
C. bolt facts list
D. puppet agent --facts
**Answer: A**
Explanation: Running ‘facter‘ prints all collected facts; ‘puppet facts show‘ can also list them, but ‘facter‘ is the direct tool.

### 60. Which command shows the status of Puppet services on Puppet Enterprise?

A. puppet infra status
B. puppet enterprise status
C. puppet status
D. puppet service status
**Answer: A**
Explanation: ‘puppet infra status‘ checks the health of Puppet Enterprise services (orchestration, database, etc.) to aid troubleshooting.

### 61. How do you restrict a class to certain nodes via node definitions?

A. node ’hostname’ { include classname }
B. class { ’hostname’: include => classname }
C. class { ’classname’: nodes => [’host’] }
D. Use tags

**Answer: A**

Explanation: Node definitions in ‘site.pp‘ can include classes based on node names, providing node-specific configuration.

### 62. Which tool allows task-based remote execution without writing manifests?

A. Puppet Bolt

B. PuppetDB

C. Hiera

D. Puppet Server

**Answer: A**

Explanation: Bolt runs tasks, scripts, and plans across nodes via SSH/WinRM, offering ad hoc automation outside of the agent model.

### 63. What is the difference between ‘storeconfigs‘ and PuppetDB?

A. PuppetDB is modern implementation storing catalogs and facts; storeconfigs used older database backends

B. storeconfigs is CLI tool; PuppetDB runs on agent

C. storeconfigs is for Hiera

D. No difference

**Answer: A**

Explanation: Storeconfigs was an older mechanism for sharing exported resources using various databases, now superseded by PuppetDB’s efficient storage and query capabilities.

### 64. How do you test Puppet code using unit tests?

A. RSpec-Puppet

B. Serverspec

C. InSpec

D. Lint

**Answer: A**

Explanation: RSpec-Puppet provides unit testing for Puppet manifests and modules, verifying catalog compilation expectations.

### 65. Which log file records puppetserver events?

A. /var/log/puppetlabs/puppetserver/puppetserver.log

B. /var/log/puppet/master.log

C. /var/log/puppet/agent.log

D. /var/log/puppetdb/puppetdb.log

**Answer: A**

Explanation: Puppetserver logs under ‘/var/log/puppetlabs/puppetserver‘, capturing API requests and catalog compilation messages.

### 66. What is the default user for Puppet agent service?

A. puppet
B. root or Administrator depending on OS
C. puppet-agent
D. nobody
**Answer: B**
Explanation: On Unix systems puppet runs as root to manage system resources; on Windows it runs as LocalSystem/Administrator.

### 67. Which Puppet feature allows parameterized classes?

A. class classname ($param="default") { }
B. define class($param)
C. class { $param }
D. module param
**Answer: A**
Explanation: Classes can accept parameters, providing default values and enabling ‘class { ’classname’: param => value }‘ declarations.

### 68. How do you ensure a cron job exists?

A. cron { ’jobname’: command => ’/path/script’, user => ’root’, ensure => present }
B. schedule { }
C. job { }
D. plan { }
**Answer: A**
Explanation: Puppet’s ‘cron‘ type manages cron entries; specifying ‘ensure => present‘ with the command and schedule enforces the job.

### 69. What is an ENC (External Node Classifier)?

A. External service providing node classification data to Puppet master
B. Module metadata
C. Hiera backend
D. Puppet agent configuration file
**Answer: A**
Explanation: An ENC is a script or service that Puppet calls to determine classes and parameters for nodes, allowing integration with CMDBs or custom systems.

### 70. Which modulepath precedence is correct?

A. environment modulepath, modulepath from puppet.conf, system modules
B. system modules first
C. puppet.conf only
D. environment only
**Answer: A**
Explanation: Puppet checks the environment-specific modulepath first, followed by the

global modulepath, ensuring environment modules override global ones.

### 71. How do you test Puppet manifests for style issues?

A. puppet-lint
B. puppet format
C. puppet style check
D. puppet fmt

**Answer: A**

Explanation: ‘puppet-lint‘ analyzes manifests for best practices and style violations, complementing syntax validation.

### 72. Which command runs Bolt tasks from module?

A. bolt task run module::task
B. puppet bolt task run module::task
C. bolt run module::task
D. puppet task run module::task

**Answer: A**

Explanation: Bolt tasks are invoked using ‘bolt task run <module>::<task>‘, optionally passing parameters via CLI flags or JSON.

### 73. How do you disable Puppet agent from automatically running?

A. puppet agent --disable "reason"
B. puppet stop
C. puppet agent --off
D. puppet disable auto

**Answer: A**

Explanation: Disabling the agent writes a lockfile preventing scheduled runs until ‘puppet agent --enable‘ is executed.

### 74. Which command re-enables Puppet agent after disable?

A. puppet agent --enable
B. puppet agent --start
C. puppet enable
D. puppet agent --resume

**Answer: A**

Explanation: ‘puppet agent --enable‘ removes the disable lockfile so agent resumes scheduled runs.

### 75. What is the purpose of ‘puppet lookup‘ command?

A. Query Hiera data for specified keys
B. List nodes
C. Lookup certificates
D. Search modules

**Answer: A**

Explanation: ‘puppet lookup‘ emulates Hiera lookups, showing resolution details for data keys, which aids debugging data hierarchies.

### 76. How do you specify array values in Hiera YAML?

A. key:
- item1
- item2

B. key: [item1, item2]

C. Both forms

D. Comma separated string

**Answer: C**

Explanation: YAML supports both block (‘- item‘) and inline (‘[item1, item2]‘) array syntax, so either representation is valid for Hiera data.

### 77. What is the difference between ‘notify‘ resource type and ‘notify‘ metaparameter?

A. notify resource prints message; notify metaparameter triggers refresh

B. notify resource triggers refresh

C. Both same

D. notify metaparameter logs message

**Answer: A**

Explanation: The ‘notify‘ resource simply logs messages during runs, while the ‘notify‘ metaparameter manages dependency-triggered refreshes.

### 78. How can you ensure Puppet agent uses cached catalog when master unavailable?

A. Enable ‘use_cached_catalog = true‘ in puppet.conf

B. Set ‘catalog_cache = true‘

C. Use ‘puppet agent --cache‘

D. Not possible

**Answer: A**

Explanation: Setting ‘use_cached_catalog‘ directs the agent to fall back to cached catalogs if the server cannot be reached, providing resilience.

### 79. Which tool orchestrates multi-node deployments with Bolt?

A. Bolt plans

B. Hiera

C. PuppetDB

D. Puppet apply

**Answer: A**

Explanation: Bolt plans coordinate multi-step workflows across nodes, combining tasks, command execution, and conditional logic.

### 80. How do you list certificate requests on Puppet CA?

A. puppetserver ca list
B. puppet cert list
C. puppet ssl list
D. puppet ca list
**Answer: A**
Explanation: In modern Puppet, ‘puppetserver ca‘ commands manage certificates, including listing outstanding signing requests.

### 81. What is exported resources feature?

A. Allows nodes to export resources collected by other nodes via PuppetDB
B. Export manifests to JSON
C. Export modules
D. Export logs
**Answer: A**
Explanation: Exported resources let nodes publish resources to PuppetDB using ‘@@‘ syntax, which other nodes can collect to build relationships like load balancer pools.

### 82. Which command compiles a catalog for a node without applying?

A. puppetserver ca compile
B. puppet master --compile <node>
C. puppetserver legacy compile
D. puppet compile <node>
**Answer: D**
Explanation: ‘puppet compile <certname>‘ requests the master to compile and output the catalog for the specified node, without delivering it to an agent.

### 83. What is the default user interface port for Puppet Enterprise console?

A. 443
B. 3000
C. 8143
D. 8081
**Answer: C**
Explanation: The console listens on 8143 for HTTPS access, separate from the puppetserver’s 8140 API port.

### 84. How do you upgrade modules managed by r10k?

A. Update Puppetfile and run ‘r10k deploy environment -p‘
B. puppet module install
C. puppet upgrade modules
D. bolt module upgrade
**Answer: A**
Explanation: r10k reads the Puppetfile for each environment; updating module versions

and running ‘r10k deploy‘ deploys new code to the module path.

### 85. What does the ‘tag‘ metaparameter do?

A. Adds labels to resources for selective runs
B. Sets environment
C. Logs messages
D. Schedules run

**Answer: A**

Explanation: Tags allow grouping resources; you can run ‘puppet agent --tags tagname‘ to apply only resources with matching tags.

### 86. Which log file contains PuppetDB logs?

A. /var/log/puppetlabs/puppetdb/puppetdb.log
B. /var/log/puppetlabs/puppetserver.log
C. /var/log/puppetlabs/console-services.log
D. /var/log/puppetlabs/orchestration.log

**Answer: A**

Explanation: PuppetDB logs, including query processing and errors, are stored under ‘/var/log/puppetlabs/puppetdb‘.

### 87. How do you configure environment cache timeout?

A. Set ‘environment_timeout‘ in puppetserver.conf
B. Use puppet.conf setting
C. Use console
D. Use Hiera

**Answer: A**

Explanation: ‘environment_timeout‘ controls how long environment data is cached; setting it in puppetserver.conf influences code reload frequency.

### 88. What is ‘app_management‘ setting?

A. Enables application orchestrator features in Puppet
B. Manages packages
C. Configures Hiera
D. Enables Puppet Enterprise

**Answer: A**

Explanation: ‘app_management‘ turns on application orchestration, allowing Puppet to manage multi-node application components via application definitions.

### 89. Which Puppet resource ensures Windows registry entries?

A. registry_key
B. dsc
C. windows_entry
D. win_registry

**Answer: A**

Explanation: The ‘registry_key‘ type (with nested ‘registry_value‘) manages Windows registry entries declaratively within Puppet.

### 90. How can you specify custom facts?

A. Place custom scripts in ‘/etc/puppetlabs/facter/facts.d‘ or Ruby in ‘lib/facter‘

B. Add in hiera

C. Use puppet.conf

D. Use bolt

**Answer: A**

Explanation: Custom facts can be implemented via executable scripts in ‘facts.d‘ or Ruby files in ‘lib/facter‘, extending the fact set available to manifests.

### 91. What is ‘code_manager‘ in Puppet Enterprise?

A. Tool for deploying code across environments integrated with r10k

B. Module generator

C. Agent manager

D. Report viewer

**Answer: A**

Explanation: Code Manager automates module deployment across environments using r10k under the hood, triggered via APIs or CLI.

### 92. Which Puppet feature allows generating multiple resources from data structures?

A. ‘create_resources‘ function

B. loops

C. Hiera

D. Bolt plans

**Answer: A**

Explanation: ‘create_resources‘ takes a resource type and hash to dynamically generate multiple resources based on data, enabling data-driven manifests.

### 93. What is the purpose of ‘contain‘ function?

A. Enforce class containment to manage resource relationships

B. Limit module scope

C. Hide variables

D. Format strings

**Answer: A**

Explanation: ‘contain‘ ensures a class is contained, meaning its resources are treated as a single block for relationship management, preventing resource leakage outside classes.

### 94. How do you view documentation for a resource type?

A. puppet describe type

B. puppet help type
C. puppet docs type
D. puppet info type
**Answer: A**
Explanation: ‘puppet describe <type>‘ prints documentation and attributes for built-in resource types, aiding manifest authoring.

### 95. Which Puppet command queries node status from PuppetDB?

A. puppet query ’nodes[certname]’
B. puppetdb query
C. puppet facts query
D. puppet status query
**Answer: A**
Explanation: ‘puppet query‘ runs Puppet Query Language (PQL) queries against PuppetDB, retrieving node lists or resource data.

### 96. What is the default file path for Bolt inventory?

A. inventory.yaml in project directory
B. /etc/bolt/inventory.yaml
C. ~/.bolt/inventory.yaml
D. config/inventory.yml
**Answer: A**
Explanation: Bolt uses ‘inventory.yaml‘ located in the project’s root to define targets, groups, and connection details.

### 97. How do you create a new Puppet module skeleton?

A. puppet module generate author-modulename
B. puppet module init modulename
C. puppet module create modulename
D. puppet forge init modulename
**Answer: A**
Explanation: ‘puppet module generate‘ scaffolds module directories and files, prompting for metadata and supporting best practices.

### 98. What does ‘puppet resource service ssh ensure=running enable=true‘ do?

A. Ensure ssh service is running and enabled
B. Display service state
C. Disable service
D. Restart service only
**Answer: A**
Explanation: Using ‘puppet resource‘ with ‘ensure=running‘ and ‘enable=true‘ enforces that the service is started and enabled at boot immediately.

**99. Which tool orchestrates change windows in Puppet Enterprise?**

A. Orchestrator service (via command ‘puppet job run‘)

B. PuppetDB

C. Code Manager

D. Console only

**Answer: A**

Explanation: Puppet Enterprise Orchestrator executes jobs across nodes during controlled windows, using commands like ‘puppet job run‘ to trigger actions.

**100. What is the purpose of ‘bolt plan new‘?**

A. Generate new Bolt plan template

B. Create Puppet plan

C. Run existing plan

D. Install plan

**Answer: A**

Explanation: ‘bolt plan new‘ scaffolds a plan file with boilerplate code, making it easier to start authoring orchestration workflows.