Upgrade Assessment Service Description

In-depth review of your Puppet Enterprise 3.x installation and creation of a detailed plan to upgrade to a supported release

Overview

The upgrade to a modern Puppet version can seem intimidating. The upgrade assessment service helps clarify the process, gives you an understanding of the complexity of updating your infrastructure, and outlines the steps to take given the risk tolerance of your business.

At the conclusion of this engagement, your team will have a plan for how to proceed and can make an informed decision about whether to take on the upgrade yourself or bring in Puppet to help. Puppet Consultants will use a combination of stakeholder interviews, system inspection, and automated tooling to provide a customized upgrade plan.

Recommended for

- Customers that need to upgrade from end of life Puppet Enterprise 3.x versions to a supported version
- Customers wanting an expert review of their existing Puppet Enterprise installation and code, related to upgrade concerns
- Customers wanting a clear plan for how to upgrade, and guidance on whether they should take on this work themselves or further engage Puppet

Consulting services description

Puppet will provide the following services related to the upgrade of Puppet Enterprise:

1. **Pre-engagement planning and preparation**
   a. Discovery call
   b. Identify 1-3 Puppet-related stakeholders/subject matter experts (SMEs) to interview during engagement and confirm their availability
   c. Other preparation items as needed (systems access, logistics, etc.)
      i. Access to Puppet code base
      ii. Prepare Puppet Enterprise installation to gather installation details
   d. To be completed by the Customer prior to the start of the engagement:
      i. Confirm that at least one technical contact has committed to be available for the duration of the engagement
      ii. Confirm systems access will be ready for engagement

2. **Engagement kickoff**
   a. Review goals of engagement and project plan
   b. Provide high-level overview of Puppet 3.x → Puppet modern version upgrade concepts, if needed
   c. Discuss current usage of Puppet and upgrade-related topics
      i. History of usage
      ii. Customizations (external node classification, report handlers, etc.)
      iii. What is/isn't working
      iv. Areas of concern in existing Puppet code
      v. Business processes impacted by Puppet
      vi. Risk profile to consider in the upgrade plan
      vii. Other background information to make the engagement most helpful
   d. Confirm access to Puppet infrastructure, Puppet code repository, and other Puppet-related systems

3. **Initial discovery and tooling setup**
   a. Use automated puppet-adviser tool to collect baseline data, such as:
      i. Infrastructure details
      ii. Node counts, platform breakdown, Puppet agent versions
      iii. Capacity
      iv. Performance
      v. Feature usage
      vi. Other relevant information
   b. Setup catalog preview tooling on dedicated node or consultant laptop
   c. Review any customizations identified during the kickoff meeting

4. **Interview identified stakeholders/SMEs**
   a. Interview the stakeholders/SMEs identified in the pre-engagement or kickoff meeting to learn about current Puppet usage and areas of challenge or concern
   b. Briefly discuss problem areas, potential workarounds, and newer features that may help, if applicable

5. **Catalog preview testing of existing Puppet code**
   a. Run Puppet code through catalog preview tooling to get a list of issues
   b. Work through simple compilation issues to get as many catalogs as possible compiling during the time allotted
   c. Produce a catalog preview report as an appendix to the upgrade plan document

6. **Draft upgrade plan**
   a. Based on discussions, catalog preview testing, and system inspection, draft an upgrade plan covering:
      i. New Puppet Enterprise infrastructure setup
      ii. Classification migration
      iii. Code updates for compatibility with a modern Puppet version

  iv. Strategy for validation of code updates based on severity of issues and business risk tolerance

  v. Agent migration strategy and steps

  vi. Decommission old Puppet Enterprise infrastructure

7. **Findings review meeting**
   a. Recap meeting to review the draft upgrade plan, reinforce concepts covered, and close out the engagement

8. **Final Upgrade Plan Revisions and Engagement Close-Out**
   a. Complete the final version of the report and send to Customer within 5 business days of the end of the engagement

Deliverables

1. Expert review of Puppet Enterprise infrastructure, Puppet code, and other relevant areas to produce a plan for upgrading to a modern version of Puppet
2. Upgrade plan document, including:
   a. Summary of findings and recommendations
   b. Detailed upgrade phases and steps within each phase
   c. Appendices of additional data gathered

Delivery approach

Our delivery approach includes using automated tooling to generate useful information about Puppet code compatibility, manual review of systems, and interviews with customer subject matter experts to understand their use of Puppet and business risk tolerance around the upgrade. This approach allows for specific recommendations for some technical issues, along with a high-level perspective for non-technical items.

Phase 0: Kickoff call, prep, & initial discovery

The Puppet Consultant will spend up to 4 hours performing preparation and discovery work prior to the engagement. This includes pre-engagement call(s) with the Customer to discuss logistics and begin the discovery phase, project planning and preparation, and creation and review of an initial project plan using Trello.

Phase 1: Engagement kickoff, initial discovery, and tool setup

The Puppet Consultant collaborates with the Customer to understand their use of Puppet, customization, areas of concern, and how critical Puppet is to their day-to-day business. This information helps ensure that the plan produced fits Customer expectations. The Consultant sets up the catalog preview tooling for identifying issues.

Phase 2: Interviewing

The Puppet Consultant and Customer stakeholders have in-depth discussions on technical and business struggles and successes that impact configuration management efforts. These interviews provide the Puppet Consultant with the detail needed to tailor the areas of focus for the upcoming discovery phase.

Phase 3: Catalog preview, system inspection, and draft plan

The Puppet Consultant reviews the catalog preview output, which identifies differences in catalogs between the old and new version, and works through the initial problems as time allows to ensure that the preview report covers the most actionable issues. The Consultant also inspects the Puppet Enterprise configuration, other upgrade-related systems, and drafts an upgrade plan based on these findings and the earlier interviews.

Phase 4: Findings review meeting

The Puppet Consultant meets with the Customer team to review the high-level upgrade process, findings from manual and automated discovery activities, and the steps involved in the upgrade. The Consultant will also talk about areas where the upgrade might be made simpler, but with slightly increased risk. The areas of Customer interest and focus from this meeting will impact the areas of emphasis in the final report.

Phase 5: Documentation

The Puppet Consultant will spend four (4) hours completing the upgrade plan documentation. The final documentation deliverable will be provided to Customer within five (5) business days of the end of the engagement, and will consist of the following:
- Summary of findings and recommendations
- Detailed report of findings and recommendations
- Appendices of additional data gathered

Timeline

Phases 1-4 of the Puppet Upgrade Assessment (as outlined in this service description) require 4 days (32 hours), delivered over one week, to complete. In addition, 8 hours are set aside for preparation and documentation, with each requiring approximately 4 hours. The chart below reflects the expected project timeline.

Phase	Pre-engagement	Day 1	Day 2	Day 3	Day 4	Post-engagement
Preparation						
Kickoff & automated discovery		■				
Interviewing		■	■			
Catalog preview, discovery, draft plan			■	■	■	
Findings review					■	
Documentation						

Fees

Product description	Hours	Cost
Puppet Upgrade Assessment	Up to 40	$11,995.00

The fees for this project will be a fixed price for a maximum of 40 hours. Puppet will use best efforts to complete the Services within this timeframe, but this project will be deemed completed if the maximum number of hours is reached.

Services for this engagement will be provided remotely, unless Customer and Puppet mutually agree the Services will be performed on-site. In addition to the fees above, Customer will be responsible for travel and expenses for on-site Services. A travel and expense estimate will be provided on the quote and billed at actuals not to exceed the estimate, unless otherwise specified in the quote that travel and expenses will be invoiced in full at the time of purchase. Any quote that does not include a travel and expense estimate will be performed remotely.

Key assumptions

The following assumptions are reflected in the services, timeline, and estimated effort outlined in this service description:
1. Phases 1-4 of the engagement (as outlined in this service description) will be performed in one week during normal business hours (Monday through Thursday, 8:00 a.m. - 5:00 p.m. local time), unless otherwise agreed to in writing by the parties.

2. Customer will provide prompt feedback on all deliverables.
3. Customer will provide prompt access to all systems and resources that Puppet will need in order to complete the work.
4. Customer must provide a single point of contact that will be available at least 75% of the time throughout the duration of the engagement.
5. Customer will provide Puppet with documentation and access to subject matter experts for non-Puppet systems/software within the scope of the engagement.
6. Customer will have identified key personnel prior to the beginning of the engagement.
7. Customer will have all necessary security exceptions, firewall rules, network routers, computer and storage resources available prior to the start of the engagement, as detailed in Appendix 1 of this service description.
8. Puppet does not provide support for third-party software that is implemented as part of a Puppet Enterprise solution, such as version control systems, repository management, packaging, and other software that is not part of the Puppet Enterprise stack.

Appendix 1 - Engagement technical requirements

A successful consulting engagement requires advance preparation. Failure to meet these pre-engagement requirements will have a direct impact on the completion of all the goals of the engagement.

The Customer is expected to review all requirements. Any requirements that are not met should be reported during the pre-engagement call or earlier. Puppet and the Customer will discuss the issues and determine whether to delay the engagement or attempt to work around the issue during the engagement.

The Puppet Upgrade Assessment requires the following:
- Access to the Puppet Enterprise infrastructure, specifically:
  - Classification
  - Hiera data
  - Puppet code
- A virtual machine with Puppet Enterprise 3.8 installed and set up with a copy of the customer classification, Hiera data, and Puppet code for use with the catalog preview tooling
  - For simplicity, this could be a compilation master pulled out of production service.
- The ability to transfer data, (such as the JSON output of the discovery tool), from the Puppet infrastructure to the Puppet Consultant's laptop for use in report creation

Appendix 2 - Summary of roles & responsibilities

- **Puppet Consultant:** This refers to the Puppet Consultant who will be responsible for the delivery of the engagement. They will be involved in most if not all aspects of the engagement.

- **Puppet Practitioner:** The Puppet Practitioner is the Customer's technical point of contact who is primarily responsible for the Puppet Enterprise implementation and is assumed to be championing the continued expansion of the usage of Puppet Enterprise post-engagement. They bear the majority of the responsibility for working with Puppet during the engagement and are expected to be present for ~75% of the engagement. Their schedule should be adjusted to ensure they are able to give the engagement the focus necessary.

- **Manager/Director:** This is most often the buyer or project sponsor at the Customer. Their role is to be aware of what is happening as part of the engagement and act as a point of contact/escalation should any assistance be needed from other groups, or if work is blocked at a level that the Practitioner cannot resolve.

- **Stakeholders/Subject Matter Experts:** Subject Matter Experts are the technical specialists in non-Puppet systems/software who are aware of but may not be heavily involved in the use of Puppet Enterprise. This may include networking, provisioning, database, application, and development teams, or any other group that might be valuable to speak with as part of this engagement.

Note: Any group that has the potential to block progress during the engagement should be informed that the engagement is taking place so they are equipped to respond to any urgent requests.

Responsibilities (? = may need to be involved)	Puppet Consultant	Puppet Practitioner	Manager/ Director	SME
Preparation				
Review and verify pre-engagement requirements are met via email		✓	?	?
Pre-engagement preparation	✓	✓	✓	?
Pre-engagement kickoff call	✓	✓	✓	?
Pre-engagement discovery call(s)	✓	✓		?
Kickoff & automated discovery				
Kickoff/discovery meeting	✓	✓	✓	✓
Finalize project plan	✓	✓	✓	

Run automated discovery tooling against Puppet Enterprise infrastructure	✓	?		
Interviewing				
Interview 1-3 Customer Subject Matter Experts	✓	?		?
Manual discovery				
Manually inspect Puppet Enterprise infrastructure	✓	?		
Review other related systems	✓	✓		?
Review related goals, processes, workflows	✓	✓		?
Other discovery TBD during engagement	✓	✓		?
Findings review				
Findings review meeting	✓	✓	✓	?
Documentation				
Create final documentation	✓			
Review and check-in final documentation to version control		✓	?	

? = May be needed

✓ = Required