



Netreo Trusted Advisor Service Offering





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1. Definition of Trusted Advisor Support and Services Provided

Netreo's Trusted Advisor Service offering is designed to provide advanced tailored support and engineering services focused on ensuring your Netreo implementation stays aligned with business needs. The service includes enhanced support, such as front of line ticket handling and 2 hour response time for critical issues, as well as additional engineering services such as bi-weekly engineering reviews, configuration review and additions, and quarterly health reporting.

Enhanced Support

Coverage Hours Critical issue support is 7x24, 365 days a year, with a 2 hour response time.

General issue support is business hours with a 4 hour response time. Business hours are 5AM – 7PM PST Monday - Friday.

Access to support is provided through three methods: Email: support@netreo.com Phone: 888-511-5145 - International: +1-949-398-0039. Customer Support Web Portal: www.support.netreo.com

2. Issue Management Process

All issues will be logged and tracked in Netreo's trouble ticket system. This can be done by the Customer (at which time Netreo Engineering is notified) or by Netreo Engineering if the issue is reported another way.

Once logged, the Netreo engineer will use the following process to work through the issue:

- 1. Prioritize the issue based on the severity level.
 - a. Priorities include
 - Critical
 - Major
 - Normal
 - Low
 - Lowest
- 2. Identify the issue, and attempt to reproduce it.
- 3. Categorize the issue.
 - a. Issue categories include
 - Misconfiguration of Netreo

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- Misconfiguration of a managed resource
- Connectivity and/or authentication issue
- Hardware issue
- Software bug
- Unsupported feature
- Add, Move or Change (AMC)
- 4. Identify the most appropriate solution.
 - a. Provide instructions or documentation on how to resolve (via configuration)
 - b. Assist the Customer with configuration assistance
 - c. Provide a software fix
 - d. Suggest environment changes
 - e. Log a feature request for a future enhancement
 - c. AMC ticket will be reviewed to determine if a separate project needs to be created, and if so, tasks and assignments are created depending on the resource and departmental requirements.
- 5. Schedule a maintenance window with the Customer (if appropriate) and resolve the issue.

3. Issue Severity

Issue severity is based on the nature of the issue and the impact that issue has on the Customer. Support ticket severity levels are detailed below and assist in determining the priority of the case.

Actions taken by Netreo support staff during the course of managing a support ticket (as well as external circumstances) may result in the severity level of that ticket changing.

- **1.** Severity 1
 - a. Production issue that severely impacts Customer use of Netreo services.
 - b. Issue halts Customer business operations and no procedural workaround exists.
 - c. Netreo is down or unavailable.
 - d. Data is corrupted or lost and must be restored from backup.
 - e. Severity 1 issues are considered "Critical," and may require Customer to provide dedicated resources available to work with Netreo on an ongoing basis until the issue is resolved. If Customer does not provide such dedicated resources, Netreo shall not be liable for any related delays in issue resolution.
- 2. Severity 2
 - a. Major functionality is impacted or significant performance degradation is experienced.
 - b. Issue is having a major impact on portions of Customer's business operations and no reasonable workaround exists.
 - c. Services are operational, but exhibit highly degraded performance to the point of major impact on usage.
 - d. Important features of the service are unavailable with no acceptable workaround, however, operations can continue in a restricted fashion.

- 3. Severity 3
 - a. There is a partial, non-critical loss of use of the services with a medium-to-low impact on the Customer's business—but the Customer's business continues to function. A short-term workaround is available, but not scalable.
- 4. Severity 4
 - a. Inquiry regarding a routine technical issue: information requested on application capabilities, navigation, best practice, installation or configuration.
 - b. Bug affecting a small number of users. Acceptable workarounds available.
- **5.** Severity 5
 - a. Inquiry regarding a mundane or insignificant technical issue: cosmetic issues or bugs affecting a very small number of users or causing no significant impact on operations. Acceptable (possibly long-term) workarounds available and in place.

4. Case Type Definitions

All Issues logged as trouble-tickets go through the following general workflow:

- 1. New this is the state of a ticket when it is logged and awaiting a Netreo Engineer to engage.
- Attention this is the state of a ticket that is not new, but has had activity and is waiting for a Netreo Engineer to re-engage.
- 3. In Progress this is the state a ticket remains in while a Netreo Engineer is actively working the issue.
- **4.** Awaiting Customer Response this is a state a ticket can be put in to solicit information of assistance from the Customer.
- 5. Answered This is the state a ticket is put in by a Netreo Engineer when the believe a ticket has been addressed, and they are awaiting a Customer to validate the resolution is complete to their liking.
- 6. Resolved this is the state a ticket is put in once a resolution is validated by a Customer, and the ticket is therefore closed.
- 7. Invalid This is the state a ticket that has been deemed invalid is put in. It is generally used for an issue that was a misunderstanding.
- 8. Duplicate This state is used for tickets that are already reported and being tracked in another ticket.

5. Response and Resolution

Critical Issue Support

Critical Priority business affecting issues will be responded to within 2 hours, and will be actively managed until resolved.

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General Issue Support

General requests will be responded to within 4 hours during regular Netreo Business hours. Depending on the complexity of these issues, resolution is targeted at being complete within 4 – 7 days. As per our Problem Management Process, Netreo will generally suggest a resolution within this timeframe, and then work with the Customer to schedule a maintenance window to make the changes during.

6. Software Defects

Critical software defects will be treated as Critical support issues (i.e. they will be responded to within 2 hours and actively managed until resolution). Once identified, fixed, and resolved, it generally takes a week for critical issues to make it through regression testing. Typically, 'hotfixes' are available sooner than this (often immediately). Hot fixes are only suggested in emergency situations as they are at much higher risk of having errors and/or side effects.

Generally, software defects are addressed within 2 weeks, and regression testing normally takes an additional 2 weeks.

7. Support and Escalation

Assigned Service Engineering Duties

A senior Netreo Services Engineer is assigned to oversee the delivery of support services provided to the Customer and ensure that support level SLAs are being adhered to. This Services Engineer will also perform project management duties related to any development services provided, act as escalation for support issues, review and report on system usage, and manage any configuration Adds, Moves or Changes requested through the Netreo Support avenues.

Support requests are handled by Netreo support and operations staff. Initial support requests are assigned to Tier 1 and Tier 2 support engineering staff based on the assigned priority of the issue. These engineers perform the initial forensics and—in most cases—the final resolution. The Netreo Support engineering team will notify the Customers assigned Netreo Service engineer, informing them of the new case.

All Trusted Advisor Service issues are reviewed by both the Netreo Support and Netreo Service engineering teams on a daily basis.

Escalation

Customers under a Trusted Advisor Services agreement receive expedited escalation directly to a Tier 3 Support Engineer, as well as the Customer's assigned Service Engineer, for all Major and Critical priority issues.

8. Engineering Services

Adds, Moves or Changes

Adds, Moves or Changes include changes in the feature usage of Netreo, as well as the addition of new functionality—such as custom pollers and availability checks. Development of any new functionality is managed through the assigned Netreo Service Engineer, and depending on the complexity of the changes required, may necessitate a "Scope of Work" be created to outline the objectives and timelines of the project.

System Auditing

The assigned Netreo Services Engineer will regularly audit the Netreo deployment and look for key indicators that can be used to adjust or improve on the configuration.

Use Reporting to find potential performance impact or opportunities to adjust controls

- Utilize Template baselining to highlight the templates causing an excessive amount of alarms
- Run active incidents reports to see the longest lasting or frequent incidents
- Time and State
- Alert / Alarm History
- Top Talker Reports
- Check reporting to validate that time series data is being collected (auto pilot)

Self-help Netreo using built in tools

- Use the mail logs to look for notifications that are not sent.
- PING checks are required and used to control the HOST status
- TCP can also be used
- Review Netreo Diagnostics tools to look for variances in Netreo system performance
- If troubleshooting polling or connectivity issues, check credentials and use the Check SNMP tool, the Ping Tool and the Traceroute tool to validate connectivity to devices that have been down for extended time - then document

Minimize alert fatigue

- Minimize over alerting by only alerting on actionable items, then use reporting for visibility into trends, capacity, etc.
- Use auto parent and child relationships for layer two and three discovery
- Fine tune if necessary
- Set re-notifications intelligently and sparingly
- For complex alerting environments, consider using webhooks to ITSM

Validate administrative best practices

- Use template cascading to assign controls, being especially attentive to applying from General to Specific
- Make sure that you are running the latest Pollers and Service Checks
- Use Auto Configuration rules to automate application of controls to newly added devices
- Ensure that the system is running on the latest Netreo release

9. Bi-Weekly Review Meetings

One-hour bi-weekly review meetings will be scheduled with the assigned Services engineer and Customer to:

- Review Netreo configuration and effectiveness,
- Review tickets and summary of support issues,
- Discuss status of any open development projects, discuss any added or upcoming Netreo features,
- Perform any ad hoc changes required in Netreo,
- Plan any future add, moves, changes tasks, and
- Review audit findings and discuss/schedule and recommended changes

For example, a sample cadence of the bi-weekly review meetings should address some, or all of:

Task Name		
Configuration Reviw		
	Review any environment change and adapt Netreo accordingly	
	Netreo module walk-through	
	Discussion of on-going or future projects which require monitoring visibility	
Report Review		
	Severity	
	History Log Summany	
	Threshold Log Summary	
	Notification Log Summary	
	Site and Application Treding	
	Netreo Diagnostics	
Incident Review		
	Identify and minimize any false positives	
	Identify any incidents that sent mutiples alerts and eliminate	
	Identify any outages that Netreo was not properly instrumented to detect and remedy	

10. Monthly Strategic Meetings

Customers assigned a Services Engineer will coordinate with Netreo and Customer resources a monthly strategy meeting. The focus of the meeting is to review status of all open engagements as well as review upcoming Customer and Netreo initiatives. Topics for review

- Roadmap items
- Customer's infrastructure changes that may necessitate changes in approach to management
- Process and engagement review
- Monthly case records and trends

11. Quarterly Reporting

On a quarterly basis, the assigned Services Engineer will provide a report (delivered in PDF or PowerPoint format) showing the alarm trends in Netreo over the course of the quarter. These reports spotlight trends in alarms and incidents (are alarms happening more or less than the previous months/quarter), trends in how alarms are being managed by Customer (number of incidents acknowledged, Mean Time to Repair), as well as recommendations on how to better utilize Netreo while adhering to best practice methodologies. Also included in these reports are statistics and observations on the health of the Netreo appliance itself; recommendations on what new or existing functionality is available in Netreo and how to implement it; as well as observations and recommendations on how Netreo can be used to improve on the proactive and reactive management of the Customer's environment.

Quarterly reports will be sent to the Customer within the first 2 weeks of the beginning of each quarter, and may include statistics and observations derived from the previous quarter—in some cases, broken down into monthly stats for that quarter.

If desired, the report can be presented by the assigned Services Engineer in a "Quarterly Review Meeting," scheduled according to Customer and Netreo engineering availability.

12. Monthly Strategic Meetings

Software updates and upgrades are included at all levels of maintenance and are available from within the UI. Trusted Advisor service agreements include software updates and upgrades, as well as support tasks and project management associated with the upgrading process.

These tasks include providing an upgrade plan that includes (but may not be limited to):

- Performing a system backup
- Configuration documentation
- Alarm and open incident reviews
- Software updating and post-upgrade system validation to ensure that the configuration and processes are intact

Software upgrade support also includes assistance in migrating Netreo from an existing platform/appliance to a new platform/appliance. (For example, migrating Netreo from one VM to another, or from a hardware appliance to a virtual appliance is managed in the same way as a Netreo software upgrade.

When performing an upgrade of Netreo that involves migration services, a "Scope of Work" will be provided and agreed upon prior to scheduling of the service.