**\*\*Project Overview\*\***

This project aims to integrate Zabbix with the CAS system via webhook alerts to automatically generate support tickets when network devices experience issues. The integration will help streamline NMS alert handling and ensure timely resolution of network problems within the SNA infrastructure.

**\*\*Stakeholders\*\*:**

**- \*\*Project Sponsor\*\*: Lenny**

**- \*\*Project Manager\*\*: Stacy**

**- \*\*Technical Supervisor\*\*: Chase**

**- \*\*Technical Lead\*\*: Nolan, Grey**

**- \*\*System Administrator\*\*: Peter**

**- \*\*Account Managers\*\*: Alexis**

**- \*\*IT Development\*\*: Franz, Rey**

**\*\*Project Phases and Milestones\*\***

**\*\*M1: Planning and Infrastructure Assessment (1 Month)\*\***

**\*\*Task 1.1: Kickoff Meeting\*\***

1.1.1- Define the project scope, deliverables, and timeline.

1.1.2 - Assign roles and responsibilities among team members.

1.1.3 - Stakeholder identification, including technical, account, and operational staff.

**\*\*Task 1.2: API and Infrastructure Assessment\*\***

1.2.1 - Review existing Zabbix and CAS API integration setup, including the configuration of media types and API endpoints.

1.2.2 - Confirm required API fields such as `property\_id`, `site\_id`, and `device\_id` for accurate alert generation.

**\*\*Task 1.3: Zabbix Media Type and Webhook Setup\*\***

1.3.1 - Configure the Zabbix webhook for API calls and alerts when device issues are detected.

1.3.2 - Test alert functionality and validate webhook triggers in the staging environment.

**\*\*M2: Development and Configuration (2 Months)\*\***

**\*\*Task 2.1: API Endpoint Setup\*\***

2.1.1- Ensure proper setup of the CAS API endpoint for alert data processing, including fields such as event severity, device type, and timestamps.

2.1.2 - Validate connectivity between Zabbix and CAS to confirm that alerts generate support tickets in CAS.

**\*\*Task 2.2: Customization and Optimization\*\***

2.2.1 - Customize JSON payloads to include all necessary fields (e.g., `mac\_address`, `serial`, `device\_status`).

2.2.2 - Optimize the API to avoid slow response times, especially in property data retrieval.

**\*\*Task 2.3: Configuration of Alerts\*\***

2.3.1 - Configure Zabbix triggers and thresholds (e.g., `event\_severity`, `device\_status`) for different device types.

2.3.2- Set up auto-escalation for unresolved alerts, notifying operational managers first, and escalating to account managers and higher if issues persist.

**\*\*M3: Testing and Validation (1 Month)\*\***

**\*\*Task 3.1: Functional Testing\*\***

3.1.1- Test webhook functionality by simulating device failures in Zabbix and verifying correct alert generation in CAS.

3.1.2 - Ensure ticket creation in CAS for triggered alerts, and confirm the accuracy of the data processed (site, device, event details).

**\*\*Task 3.2: Load Testing\*\***

3.2.1 - Perform load testing to ensure the system handles multiple simultaneous alerts without delay or failure.

**\*\*Task 3.3: User Acceptance Testing (UAT)\*\***

3.3.1- Allow stakeholders (Operations and Account Managers) to test the system’s responsiveness and functionality under real-world conditions.

**\*\*M4: Deployment and Go-Live (1.5 Month)\*\***

**\*\*Task 4.1: Pilot Deployment\*\***

4.1.1 - Roll out the webhook integration for a limited number of sites/devices for final testing.

4.1.2- Monitor alert triggers and CAS ticket generation in real-time.

**\*\*Task 4.2: Full-Scale Deployment\*\***

4.2.1 - Expand the deployment to cover all relevant devices and sites in the SNA network.

4.2.2- Monitor the live environment for issues post-deployment.

**\*\*Task 4.3: Staff Training\*\***

4.3.1- Conduct training for support and operational teams on managing and responding to webhook alerts from Zabbix in CAS.

**\*\*Task 4.4: Go-Live\*\***

4.4.1 - Transition the Zabbix webhook alert system to full production use, ensuring continuous monitoring.

**\*\*M5: Post-Implementation Monitoring and Optimization (1 Month)\*\***

**\*\*Task 5.1: Performance Monitoring\*\***

5.1.1 - Monitor the performance of the Zabbix webhook system post-deployment, tracking alert accuracy and system response time.

**\*\*Task 5.2: User Feedback and Optimization\*\***

5.2.1 - Gather feedback from stakeholders to identify any issues or areas for improvement.

5.2.2 - Make necessary optimizations based on performance data.

**\*\*Task 5.3: Support and Maintenance\*\***

5.3.1 - Implement a short-term support plan to handle any post-deployment issues.

**\*\*Project Milestones\*\***

**- \*\*M1: Planning and Infrastructure Assessment Completed\*\***

**- \*\*M2: Development and Configuration Completed\*\***

**- \*\*M3: Testing and Validation Completed\*\***

**- \*\*M4: Full Deployment and Go-Live\*\***

**- \*\*M5: Post-Implementation Monitoring and Optimization\*\***