Enterprise IT Service Management & Automation Lab w/ Zendesk Suite

Author: Darnell Maiden | **Certifications:** CompTIA Security+, Google IT Support Professional Certificate, Google Cybersecurity Professional Certificate | **Target Environment:** Zendesk Suite Cloud Platform (Enterprise Trial Tenant) |
PORTFOLIO WEBSITE: https://www.saintmaiden.site/

EXECUTIVE SUMMARY:

PROBLEM:	SOLUTION:	IMPACT:
Growing enterprise organizations frequently suffer from manual ticket triage, leading to misrouted support requests, delayed response times for critical hardware failures, missing asset details during intake, and an overburdened Tier-1 helpdesk handling repetitive, self-resolvable technical inquiries.	**I architected and deployed an end-to-end service desk in Zendesk Suite, implementing multi-tier support groups, automated trigger routing rules, customized intake form schemas, tier-0 knowledge deflection, and self-service ticketing workflows.**	**Centralized IT service delivery, automated Tier 1 hardware ticket triage, standardized employee hardware intake, and enabled ticket deflection to reduce overall helpdesk volume and MTTR.**

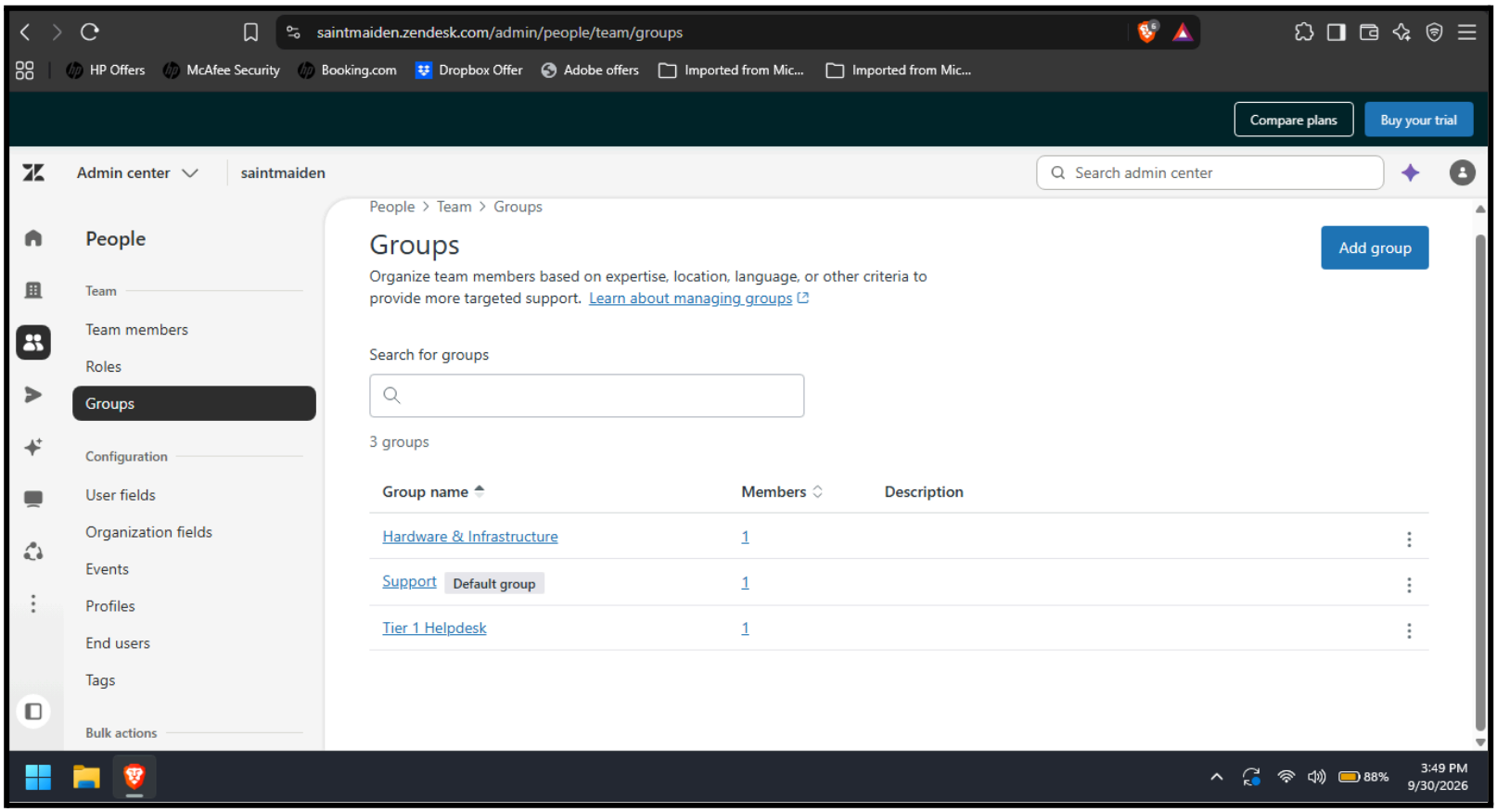
TECHNICAL TOPOLOGY/SPECIFICATIONS:

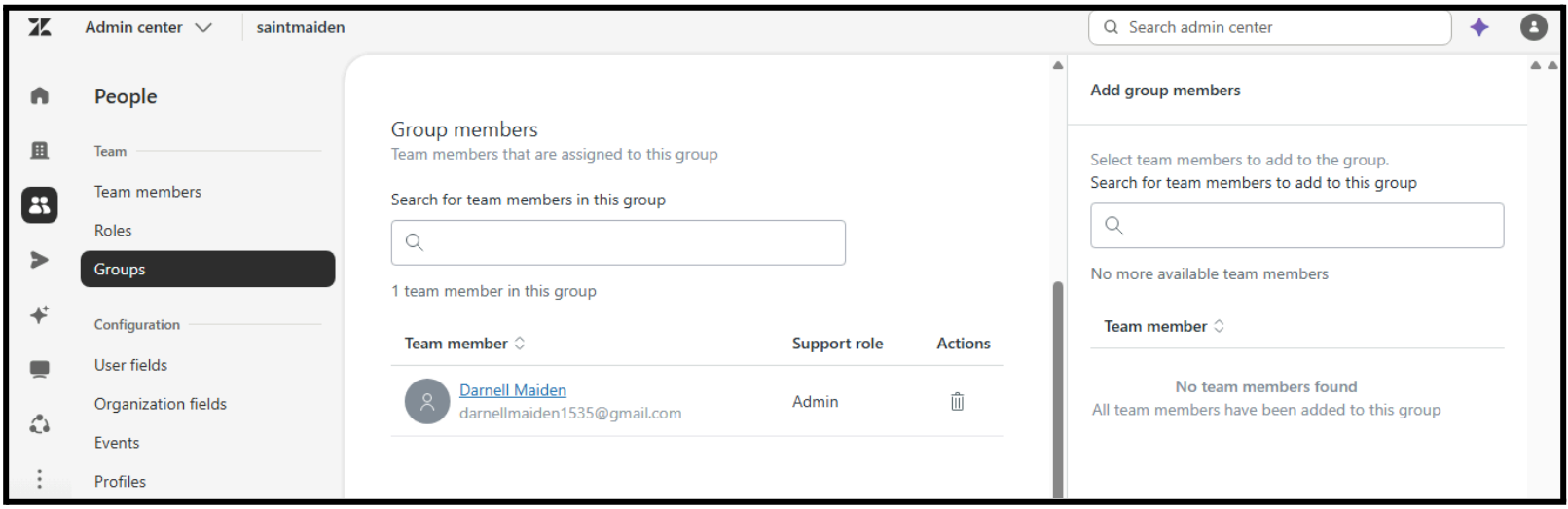
COMPONENT/ROLE	SYSTEM/SPACE NAME	SERVICES & ROLES
Service Desk Platform	**Zendesk Agent Workspace/Admin Center**	**Ticket Lifecycle, User/Group Management, SLA Policies**
Automation & Routing	**Zendesk Business Rules (Triggers & Automations)**	**Automated Triage, Assignment Group Routing, SLA & Priority Governance**
Self-Service Portal	**Zendesk Guide (Help Center Engine)**	**Tier-0 KB Articles, Ticket Deflection Engine, Knowledge Base**

PHASE 1: WORKSPACE STANDARDIZATION & SUPPORT GROUP PROVISIONING

ACTION: Provisioned a Zendesk Suite Enterprise environment. Navigated to Admin Center > People > Groups to create standardized support queues (`Tier 1 Helpdesk` and `Hardware & Infrastructure`). Assigned administrator accounts to both groups.

WHY?: Establishing structured support groups provides clear line-of-sight for queue isolation, prevents unassigned ticket sprawl, and ensures proper governance across multi-tier support models.

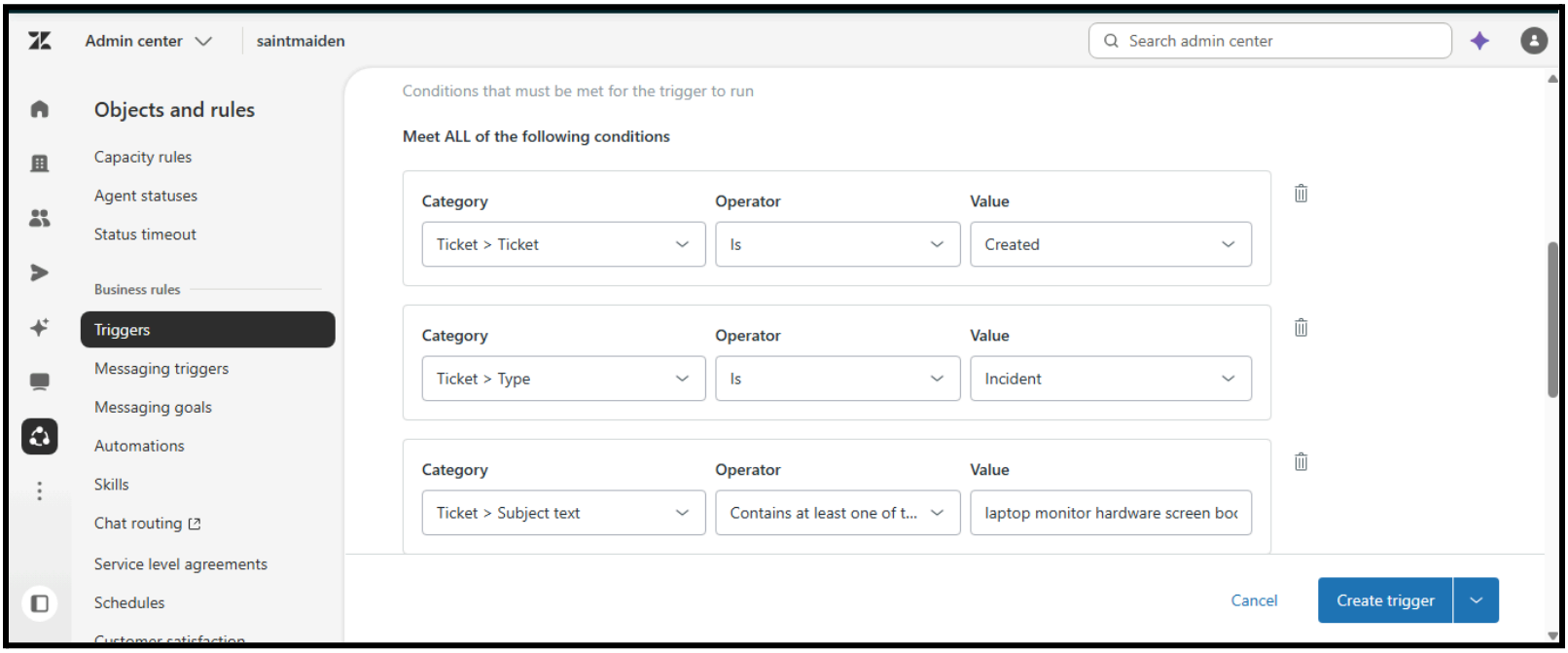


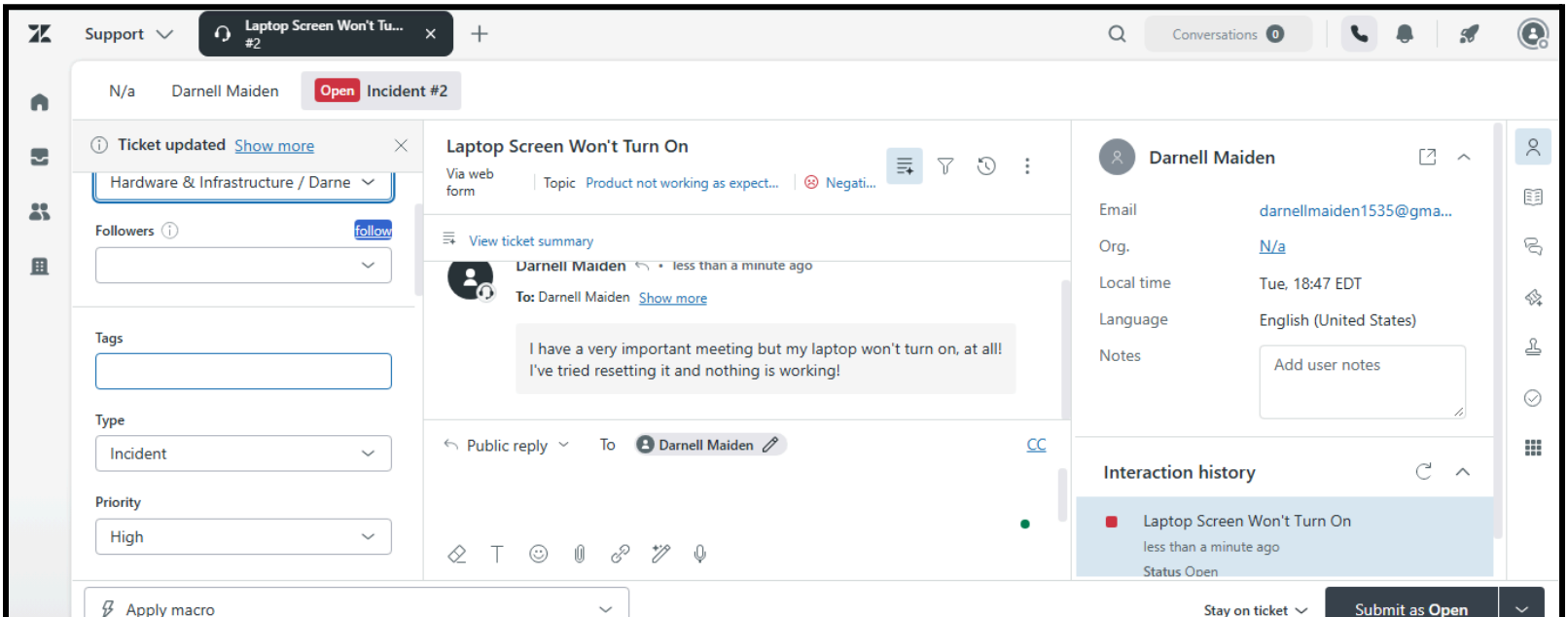


PHASE 2: INCIDENT MANAGEMENT & AUTOMATED TRIGGER RULES

ACTION: Navigated to Objects and rules > Business rules > Triggers and configured `Automated Hardware Incident Routing`. Set conditions to parse new tickets with `Type = Incident` containing keywords (`laptop`, `monitor`, `hardware`, `screen`, `boot`). Set automated actions to route matching tickets to `Hardware & Infrastructure` with `High` priority. Executed test incidents to verify automatic group routing.

WHY?: Unassigned or misrouted tickets cause SLA breaches and increase Mean Time to Resolution (MTTR). Automated trigger rules eliminate manual triage overhead, placing critical hardware faults directly into technician queues instantly.

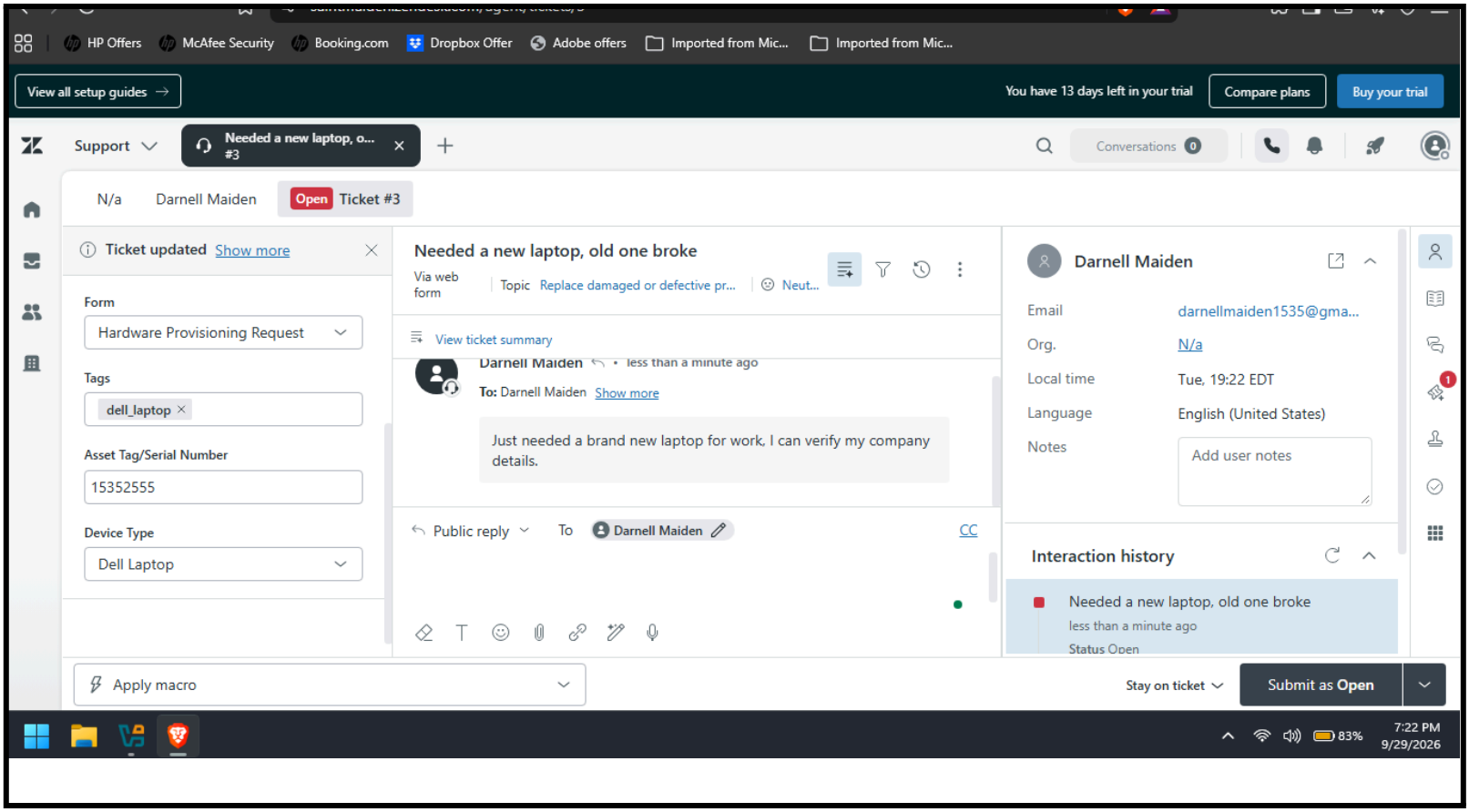


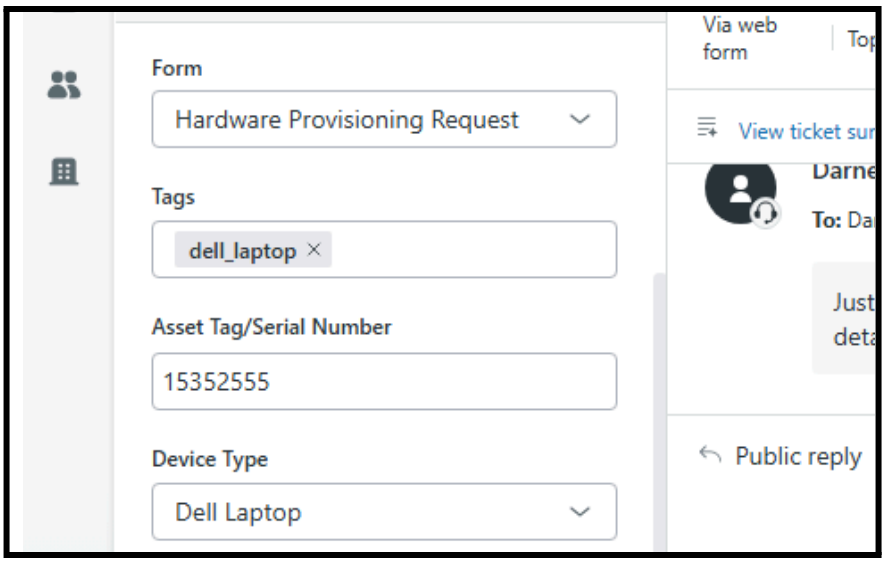


PHASE 3: SERVICE CATALOG & CUSTOM INTAKE SCHEMAS

ACTION: Navigated to Objects and rules > Tickets > Fields to create custom dropdown (`Device Type`) and text (`Asset Tag / Serial Number`) fields. Created a custom form (`Hardware Provisioning Request`) under Tickets > Forms and integrated the new input fields into the user intake workspace.

WHY?: Free-form incident tickets submitted for hardware provisioning create administrative delays. Standardized intake forms mandate required inputs upfront, providing technicians with structured assets at first intake.

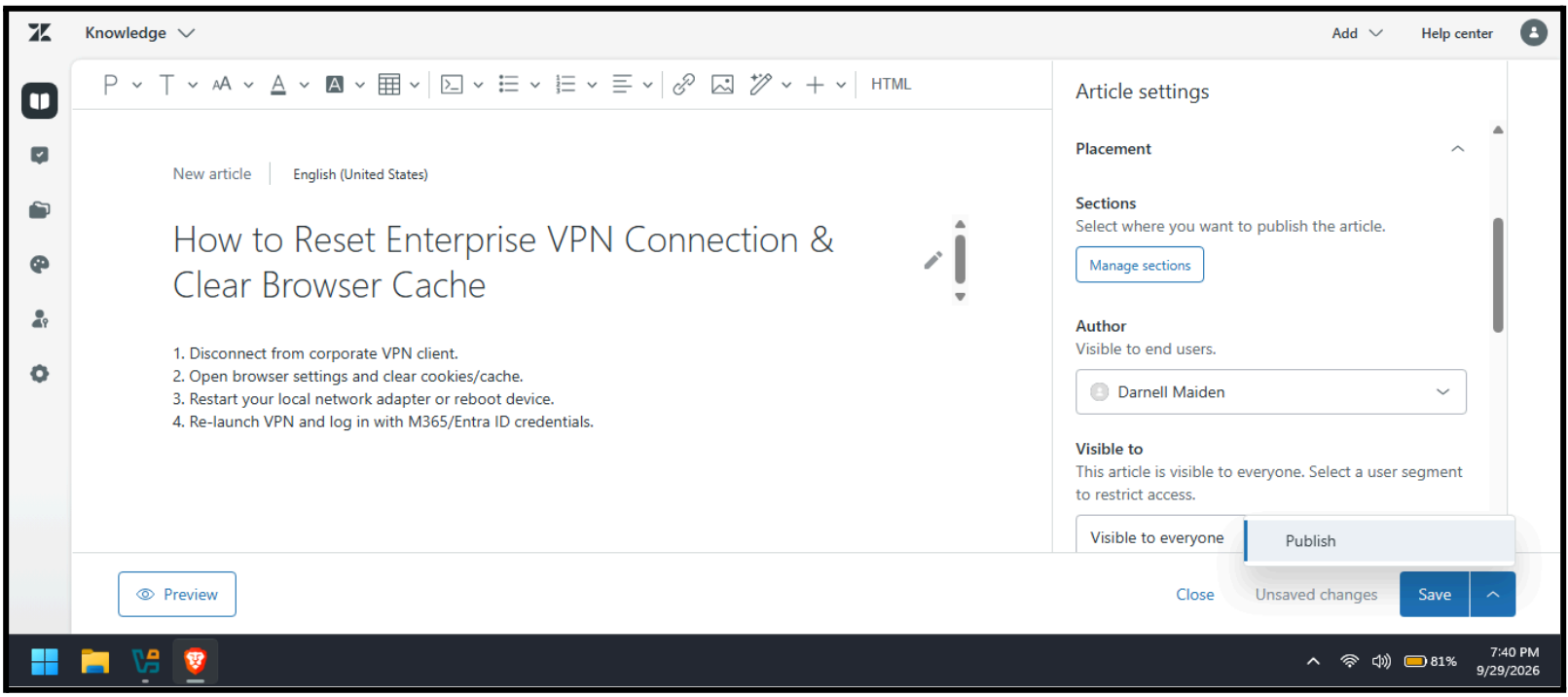


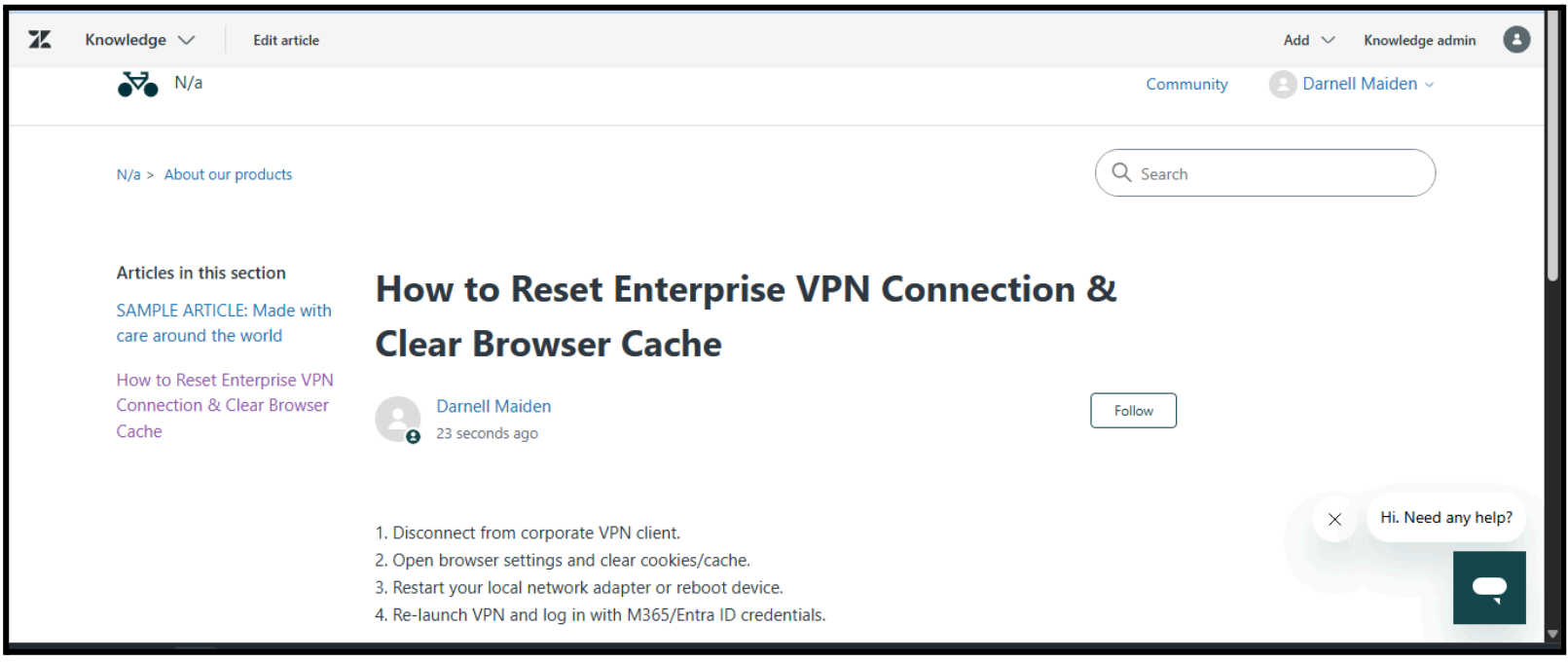


PHASE 4: KNOWLEDGE BASE & TICKET DEFLECTION

ACTION: Launched Zendesk Guide and authored a Tier 0 support article in the IT Knowledge Base under General/FAQ (`How to Reset Enterprise VPN Connection & Clear Browser Cache`). Published the article to the public Help Center portal for self-service deflection.

WHY?: Repetitive, low-complexity issues strain helpdesk bandwidth. Publishing self-service Knowledge Base articles enables ticket deflection, allowing end users to resolve routine issues independently while improving First Contact Resolution (FCR) metrics.





TECHNICAL SUMMARY:

DOMAIN/CONTROL AREA	CONFIGURATION & IMPLEMENTATION
CLOUD SERVICE INFRASTRUCTURE	**Zendesk Suite Enterprise Tenant, Agent Workspace, Multi-Tier Support Queues (**`Tier 1 Helpdesk`**,** `Hardware & Infrastructure`**)**
INTAKE & ASSET GOVERNANCE	**Custom Ticket Schemas, Mandated Dropdown Attributes (**`Device Type`**), Serial/Asset Tag Input Controls**
AUTOMATION & TRIAGE LOGIC	**Event-Driven Business Rules (Triggers), String/Keyword Parsing, Automated Priority Escalations (**`High`**)**
TIER-0 DEFLECTION & KNOWLEDGE	**Zendesk Guide Help Center, Self-Service Troubleshooting Knowledge Base, Direct Deflection Workflows**
SYSTEM TESTING & VALIDATION	**End-to-End Incident Routing Verification, Ticket Lifecycle Validation, Custom Form Schema Testing**

RESULT & BUSINESS IMPACT:

- **ELIMINATED MANUAL TRIAGE BOTTLENECKS: Automated keyword parsing and rule-based assignment immediately direct critical hardware incidents to specialist queues, cutting initial triage time to zero.**
- **STANDARDIZED ASSET INTAKE & SCHEMAS: Mandatory custom fields eliminate administrative back-and-forth by requiring device types and asset tag data directly at ticket creation.**
- **LOWERED MTTR & OPERATIONAL OVERHEAD: Automated priority scoring (**`High`**) ensures urgent endpoint and hardware faults receive immediate technician attention to safeguard uptime.**
- **ESTABLISHED TIER-0 SELF-SERVICE DEFLECTION: Publishing clear, step-by-step VPN and connectivity guides enables end users to self-resolve routine issues, reducing overall ticket volume and freeing Tier-1 capacity.**

Author: Darnell Maiden | **Certifications:** CompTIA Security+, Google IT Support Professional Certificate, Google Cybersecurity Professional Certificate | **Target Environment:** Zendesk Suite Cloud Platform (Enterprise Trial Tenant) |
PORTFOLIO WEBSITE: https://www.saintmaiden.site/