AUTOCENE

A NEW ERA IN AUTOMATION

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Autocene Use Case Series

Customer: Fortune 250 Technology & Manufacturing Firm

Automation of Datacenter Assessment & Compliance Functions

June 2020

Summary

This corporation in the Fortune 250 has 60+ datacenters located around the world. There are five different types of facilities that range from fully owned physical locations to shared colocation centers.   Each datacenter location requires regular assessments in order to ensure the physical facility is managed properly, disaster recovery protocols are being followed, and that all locations are actively keeping the organization's data secure.

Facility assessments, security assessments, and disaster recovery assessments review hundreds of points of potential failure. All assessments have different managers involved and a multitude of stakeholders. In addition, these assessments all require a separate set of questions, separate processes and separate reports.

Performing regular audits and managing these important functions for 60 different locations in an organized and timely manner was a big challenge for datacenter management.

Some of the challenges of this assessment and audit process include:
- Performing regular assessments along with all of the actions required for each location
    - Creating questionnaires for each process and each location
    - Sending out spreadsheets for additional information input
    - Establishing due dates for each location
    - Sending follow-up reminders of those due dates
- Each type of assessment (facilities, disaster recovery, and security) required a different set of questions & checks depending on facility type and criticality rating
- The data had to be reentered to create the required summaries

When the Autocene Platform was implemented, this organization was able to streamline many of the components of these important processes, reducing the preparation time required for reviews.

Some of the benefits this corporation found as a result of automating these processes include:
- Automatic initiation of assessments based on the Review Schedule
- Automatic summarization of findings
- Notifications and reminders on action items
- Easily manage scheduling and distribution of assessment questionnaires through a custom dashboard
- Tracking of all requirements in a single database
    - Filtering and searching based on specific requirements
    - Ease of reporting/audit
    - Allows exporting of data to business intelligence tools

Facility Assessment- Pre-Autocene Situation

This process requires the interaction of datacenter managers, datacenter engineers, corporate management, and the external auditor. The organization's process begins 90 days prior to the actual Quality Review being performed.

The pre-Autocene process was initiated by the auditor:

- **90 days before the Quality Review** – the auditor sends a questionnaire to the datacenter manager.
    - The datacenter manager completes his sections and then forwards to the mechanical engineer, then to the electrical engineer.
    - This all happens in a sequential order.
- **60 days before** – the datacenter manager returns the completed form to the corporate datacenter team.
- **50 days before** - the corporate datacenter team generates a summary and returns it to the datacecnter manager for review with copies to the other team members.
- **49 to 30 days before** - the datacenter manager and corporate datacenter team determine the best course of action for each finding.
- **30 days before** - all findings have been resolved.

Some challenges faced with this process:

- Questionnaires vary depending on Assessment Type, Facility Type, and Facility Criticality
    - There can be at least 14 variations of the questionnaire
        - Assessment Types
            - On site
            - E-mail
            - Phone Call
        - Facility Types
            - Fully Owned
            - Research Facilities
            - Manufacturing Facilities
            - Sub-Contracted
            - Colocation
        - Facility Criticality
            - High
            - Medium
            - Low
- Questionnaires can contain up to 300 questions.
    - Each response to a question must be evaluated by the auditor to determine if it is in compliance with policies.
- Questionnaires can be distributed to 3 different personnel at each datacenter.
- Each section of the questionnaire can only be completed sequentially, one section at a time.
- Action items that arise from the assessments can be owned by different personnel even in the same location and can have due dates with varying time intervals.

Facility Assessment – The Autocene Solution

Autocene introduced automation in different parts of the Facilities Assessment process:

1. Automatic initiation of the Facilities Assessment process based on a schedule set by the auditors
   - With Autocene, auditors just need to enter the Quality Review date and the rest of the dates are automatically calculated.
2. Controlled distribution of the Assessment Questionnaires to the managers and engineers
   - This allows datacenter managers and engineers to complete different sections of the assessment in parallel instead of in a series.
   - Questionnaires are automatically generated depending on the Assessment Type, Facility Type, and Facility Criticality.
     - The auditors only need to review the questionnaire once a year to determine the relevance of the questions to get ready for the next Assessment cycle.
3. Summarization of findings
   - This Autocene application eliminated the need for auditors to go through the responses and pick out non-compliant items manually.
     - With Autocene, the auditors only need to determine what constitutes a non-compliant response once and the list of non-compliant items are automatically generated for the auditor and datacenter manager to review.
   - In addition to automatically generating summaries of the responses, the data collected through the automated assessments is imported into their Business Intelligence tool where they use their own risk scoring to determine the real-time compliance of each datacenter.
4. Notification on Action Items
   - With Autocene, automatic e-mails are sent to the action item owners and the auditors to highlight upcoming due dates and overdue items.
     - This increased the visibility on the action items and contributed to its timely completion.

Disaster Recovery Compliance – Pre-Autocene Situation

The Disaster Recovery (DR) Core team at this organization is responsible for both Datacenters and Applications. With over 60 datacenters and 180 Core Applications, this team found itself overwhelmed with the collection and reporting of data.

Each Datacenter has four DR compliance requirements:
- o Documentation – update required every year
- o Tabletop Scenarios – update required every year
- o Business Impact Analysis – update schedule depends on Datacenter criticality
- o Exercise – update schedule depends on Datacenter criticality

Each Application has three DR compliance requirements:
- o Documentation - update required every year
- o Tabletop Scenarios - update required every year
- o Exercise - update required every 3 years

An Excel Spreadsheet on SharePoint was used to track all of the DR requirements and compliance Data. As more applications and datacenters were added, the harder it became to keep track of all the requirements, their due dates, and the responsible people for each item. Furthermore, consistency in the data was not kept, so it became harder to report on and filter pertinent DR Compliance data.

Disaster Recovery Compliance - The Autocene Solution

The Autocene Platform was used to track all DR requirements.
- This helped the DR Core team to easily monitor and update DR compliance data.
- The DR Core team now has a customized dashboard within Autocene where they can quickly filter through the DR requirements at any time based on the information required.
- This is also where DR Core team members approve any updates provided by different departments.
- DR Core team members also manage the associated attachments that accompany those updates.

Using Autocene for DR Compliance Tracking, this corporation also allowed authorized non-administrative users to be more aware and in control of the DR Requirements that they are responsible for.
- Since the application is web-based and the interface is designed for ease-of-use, even occasional non-administrative users can operate the DR Compliance Tracking application without training.

Autocene has also automated the notifications of DR requirement due dates.
- Previously, due dates were often missed because of the long intervals between reviews.
- These automated notifications also consider the escalation logic for each DR requirement so that the right people are notified about important due dates at the required time.

Security Assessment – Pre-Autocene Situation

Like the Facilities Assessment process, this process requires the interaction between site managers and corporate management to ensure IT security controls are implemented. The process also requires that sites are compliant with IT policy and standards.

Before Autocene:

- Security Assessment data was tracked through Excel spreadsheets on SharePoint.
- Security program managers manually distributed the Security Assessment Questionnaire to site managers. Answered questionnaires, relevant attachments, and management reviews were stored in different areas, making it cumbersome to consolidate the data for reporting and compliance tracking.

Security Assessment – The Autocene Solution

Using the Autocene platform to distribute, collect and report on the security compliance data of all sites streamlined the entire process.

- Security program managers can now easily manage the scheduling and the distribution of Security Assessment questionnaires through a custom dashboard within Autocene.
  - Through this dashboard, security program managers and site managers can view and provide updates on action items that resulted from the assessments.

All security assessment data and any relevant documents are stored in one database.

- Allowing for easy exporting to the team's business intelligence tool which is used for real-time reporting.
- Autocene automatically records the metadata on any documents uploaded as part of the Security Assessment, facilitating the introduction of a document and records management system for all Security Assessment data.

Benefits of the Platform

Autocene has provided the organization with a platform for all datacenter compliance related data. The processes were streamlined by automating peripheral tasks involved in distributing, collecting, and reporting on compliance data. This removed the need for managing multiple spreadsheets, leaving more time for teams to concentrate on action items pertaining to compliance. With the data consolidated into one central location, reporting and filtering of data is now much easier and efficient.

As seen in the figure below, the processes for tracking datacenter compliance are in discrete groups but are tied together through the Action Item Tracking application. This became possible because of automating the processes. This automation also introduced the standardization of the data collected. Having consistent data allowed the organization to tie compliance data from different groups and report on the overall compliance of a datacenter.
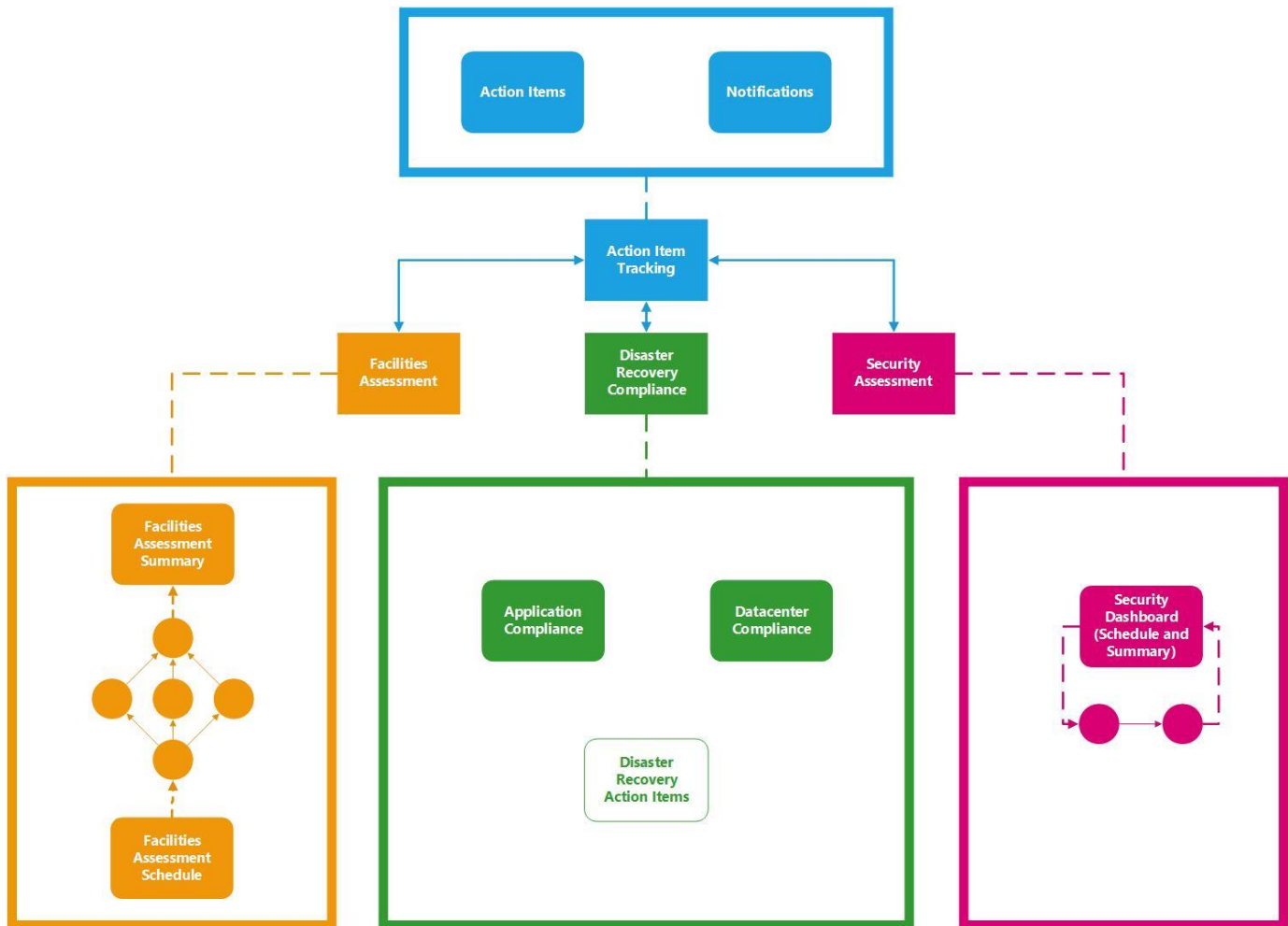
Sample Screens

Facilities Assessment Auditor Interface

<div style="text-align: right">

Test
Assessment Summary

</div>

[Back to Dashboard]

ASSESSMENT DETAILS

Datacenter:	Test	Location:	Test
Start Date:	04/08/2020	Type:	On site

TOTAL ASSESSMENT ITEMS   4

High	Medium	Low	FYI
0	2	2	0

STATUS LEGEND

FYI	For your Information
1	Seeking agreement
2	Aligning done
3	Assessment item addressed
4	Accepting the risk of assessment item is in discussions with management
5	Risk of assessment item accepted by management and will not be addressed

REVIEW FULL ASSESSMENT

[Section A]   [Section B]   [Section C]   [Section D]

1.0 Section A

1.3.1	Is there a generator ?		Risk Level:	Status:	Date :

1.3.1 Is there a generator ?

Site: DC   Response: No
Comment:
Last Updated: Apr 8 2020

Risk Level: Medium   Status: 1   Date : May 25 2020

Owner
user1@company.com

Manager
managerA@company.com

[Show Acronyms] [Show Comments] [Edit]

1.2.21 Have vendor owned batteries (telco, storage, etc.) have been inspected in the last 12 months?

Site: DC   Response:
Comment:
Last Updated: Apr 8 2020

Risk Level: Low   Status: 3   Date : May 30 2020

Owner
user20@company.com

Manager
supervisorZ@company.com

[Show Acronyms] [Show Comments] [Edit]

1.2.21 Have vendor owned batteries (telco, storage, etc.) have been inspected in the last 12 months?

Site: MDF   Response:
Comment:
Last Updated: Apr 8 2020

Risk Level: Low   Status: 5   Date : Jun 5 2020

Owner
user17@company.com

Manager
directorX@company.com

[Show Acronyms] [Show Comments] [Edit]

The image above shows an example of the interface for a facilities assessment auditor. This is where they can review and update a Facilities Assessment for one datacenter. Each item listed in the summary is a finding that the respective owner needs to address by the respective date. Automatic notifications are sent to the owner when the due date is upcoming and is escalated to the owner's manager when the due date has passed.

Disaster Recovery Compliance Tracking – Application Compliance Dashboard

The image above shows an example of the interface for Disaster Recovery Compliance Tracking. There are over 180 Applications with three requirements each, all having different owners and different stakeholders. Users can easily find the information for applications that they are interested in by using the filters available. Automatic notifications are sent to the primary contact and the interested parties when the due date is upcoming. Notifications are escalated to management when the due date has passed.

Security Assessment Scheduling Dashboard

Security Assessment									Dashboard

Site	Region	Site IT Manager	ITQR Prg Manager	Date Filters				State
				○Start Date ○Due Date ●QR Date ○None				All ▾
				Filter Type: ●By Year ○Date Range				
				Year: [<] 2020 [>]				
				[View All] [Reset Default Filters] [Apply Filters]				

Site and Region	Managers	Start Date	Due Date	QR Date	State	Compliance Count				
						Yes	No	NA		
Datacenter 1 Region: Region A	Site: jsmith@company.com Prg: manager1@company.com	10/31/2019	12/15/2019	02/20/2020	Approved	1	1	8	✏	🔍
Site ABC Region: Region B	Site: jdoe@company.com Prg: director1@company.com	10/17/2019	08/16/2020	09/30/2020	Started	0	0	0	✏	
Colocation XYZ Region: Region A	Site: jsmith@company.com Prg: manager1@company.com	10/22/2019	12/06/2019	01/20/2020	In Review	2	4	4	✏	🔍
Datacenter 5A Region: Region B	Site: jdoe@company.com Prg: director1@company.com	10/31/2019	11/10/2019	01/31/2020	In Review	0	1	9	✏	🔍
XYZ Site Region: Region A	Site: jsmith@company.com Prg: manager1@company.com	10/21/2019	01/13/2020	02/27/2020	In Review	0	10	0	✏	🔍

The image above shows an example of the interface for a Security Program Manager. This is the interface used to:
- Set the dates when the security assessments are automatically sent out
- Due dates for those assessments
- The quality review date is for the site

The Security Program Manager can see the status of each assessment and view the details after the assessment has been completed. Filters are available to help them easily find the assessments for a specific site.

Discover Autocene

Autocene Enterprise Automation Platform gives customers the flexibility of a Code-Free Application Development Platform, combined with the power of an Intelligent Process Automation solution. It gives enterprises the ability to rapidly deploy fully configurable **Autocene "Workcenes"** that are capable of automating even the most complicated business processes.

Autocene Workcenes improve productivity by automating both high value, mission critical processes and eliminating time consuming repetitive tasks. **Autocene** makes both Attended, Semi-Attended & Unattended automations easy, freeing end users and adding value to your organization's critical processes & bottom line. All with no developers needed!

Autocene Passport bidirectionally integrates data with any of your existing Enterprise applications & databases (On-Premise or Cloud Hosted). Data can seamlessly travel to and from multiple disparate systems and/or **Autocene Workcenes**, monitoring databases and automating integrations, centralizing data for end users & eliminating time-consuming manual data entry.

Autocene Atlas is our patented AI-based Natural Language processes solution. Atlas provides content processing, context matching & role assignment capabilities. **Autocene Atlas** takes unstructured text from emails, text messages, documents & voice messages, transforming it into structured data used to initiate your business processes. This eliminates time-consuming manual entry and reduces human error.