

Orchestrating a Disaster Recovery Test

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eBRP Solutions

Playbook to conduct a
successful and efficient
Disaster Recovery Test

Why DR Test?

Plan “Viability”

Task Sequencing & Dependencies

Collaboration & Communications

Manageability

Gap Analysis – Assumptions, RTO, Staff

Why DR Test - **Plan “Viability”**

Activation in Different Scenarios

Plan Objective / Scope

Assumptions

Resource Planning

RTC vs. Recovery Time Objective

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Why DR Test - **Plan Activation - Scenarios**

- Scenario
 - Cyber Security Incident Scenarios
 - Crisis Management Activation Scenarios
 - CM01: Crisis Communication - External
 - CM02: Crisis Communication - Internal
 - CM03: Crisis Communication - Regulators
 - Business Continuity Scenarios
 - IT Service Continuity / Disaster Recovery
 - DR01: Production Data Center (PDC) Recovery
 - DR02: Data Center Failover: CAM to MEM
 - DR03: Data Center Infrastructure Restore
 - DR04: Tier 0 App Restores
 - DR05: Tier 1 App Restores
 - DR06: Mainframe Sys:A Restore
 - Facilities / Site Incidents

Why DR Test - **Task Sequencing & Dependencies**

Infrastructure Dependencies

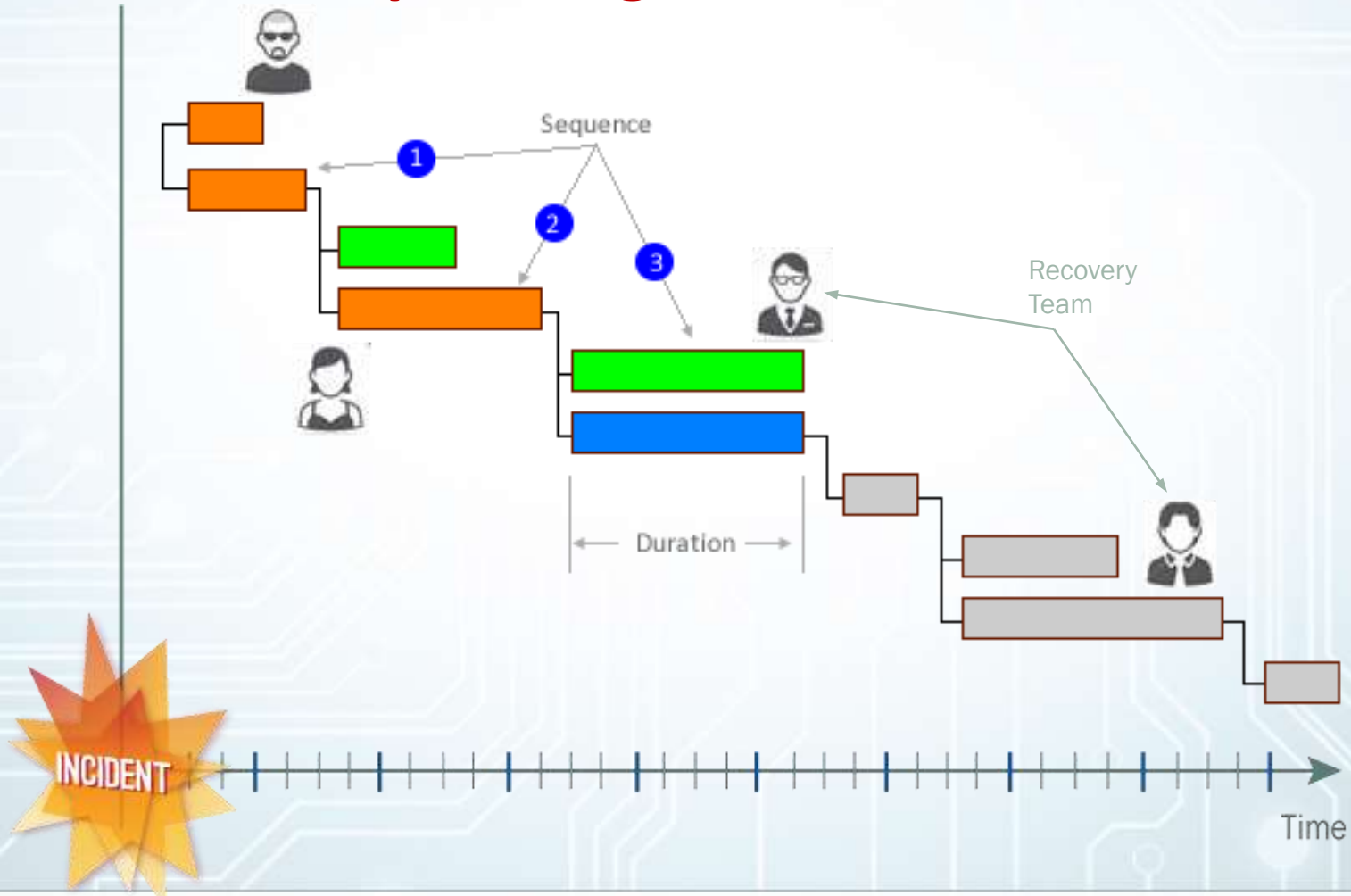
Internal & External Dependencies

Tasks Workflow / Playbook

Task Duration

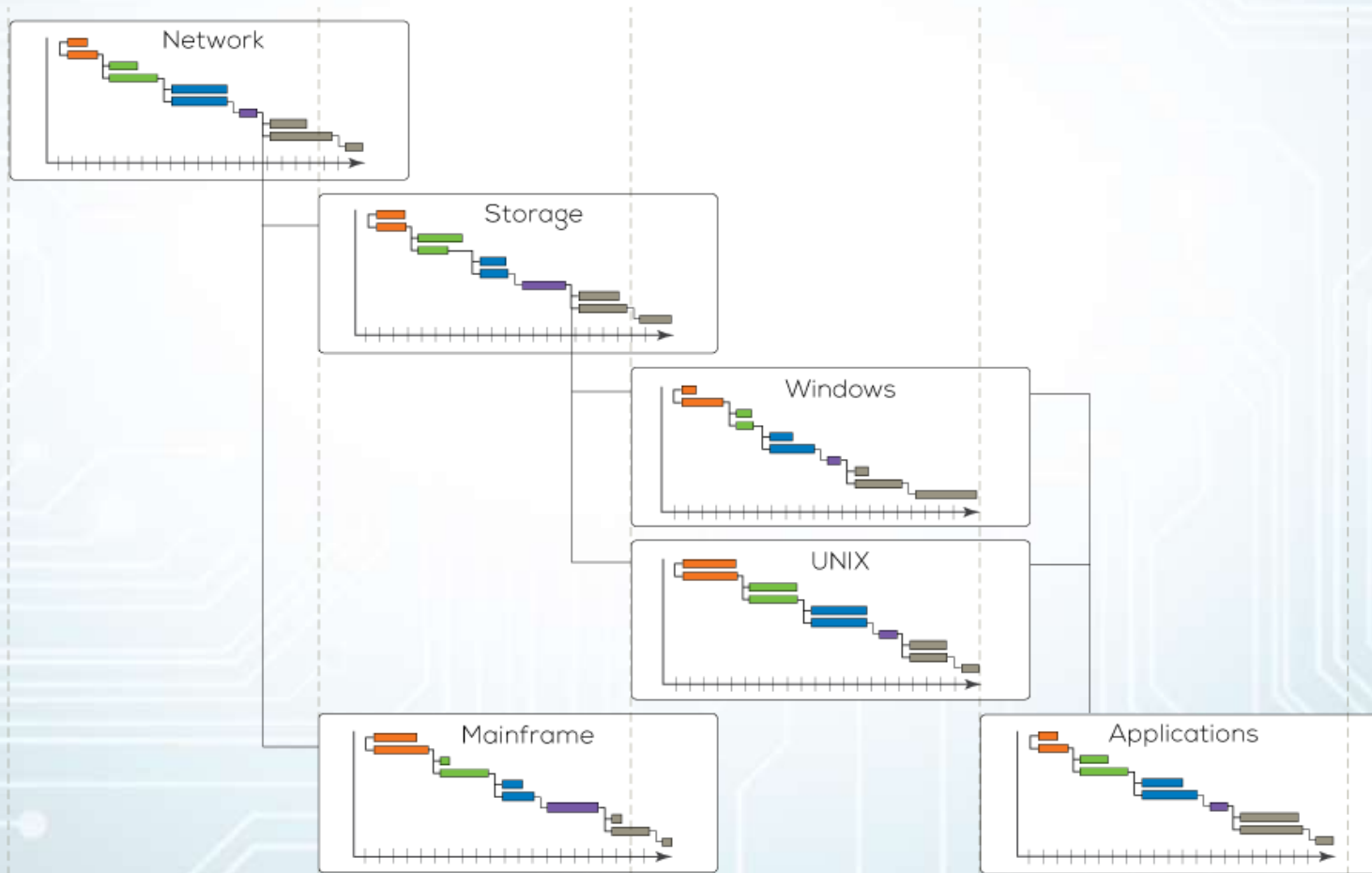
Task Assignment - Resource

Plan Task Sequencing



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Plan Sequencing - External Dependencies



Why DR Test - **Collaboration & Communications**

Task Handoffs

Resource Activation

Real-Time Task Status

Issue Management

Updates & Reporting

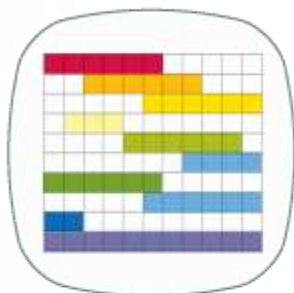
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The Stakeholders



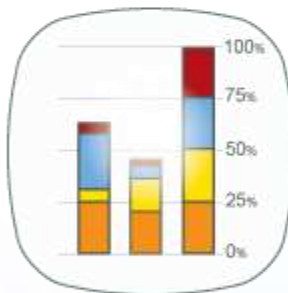
Incident Commanders

Activate Plans & Manage Incident



Recovery Teams

Complete Tasks to Recover Systems



Application Managers

Monitor Systems Recovery Status



Client Testers

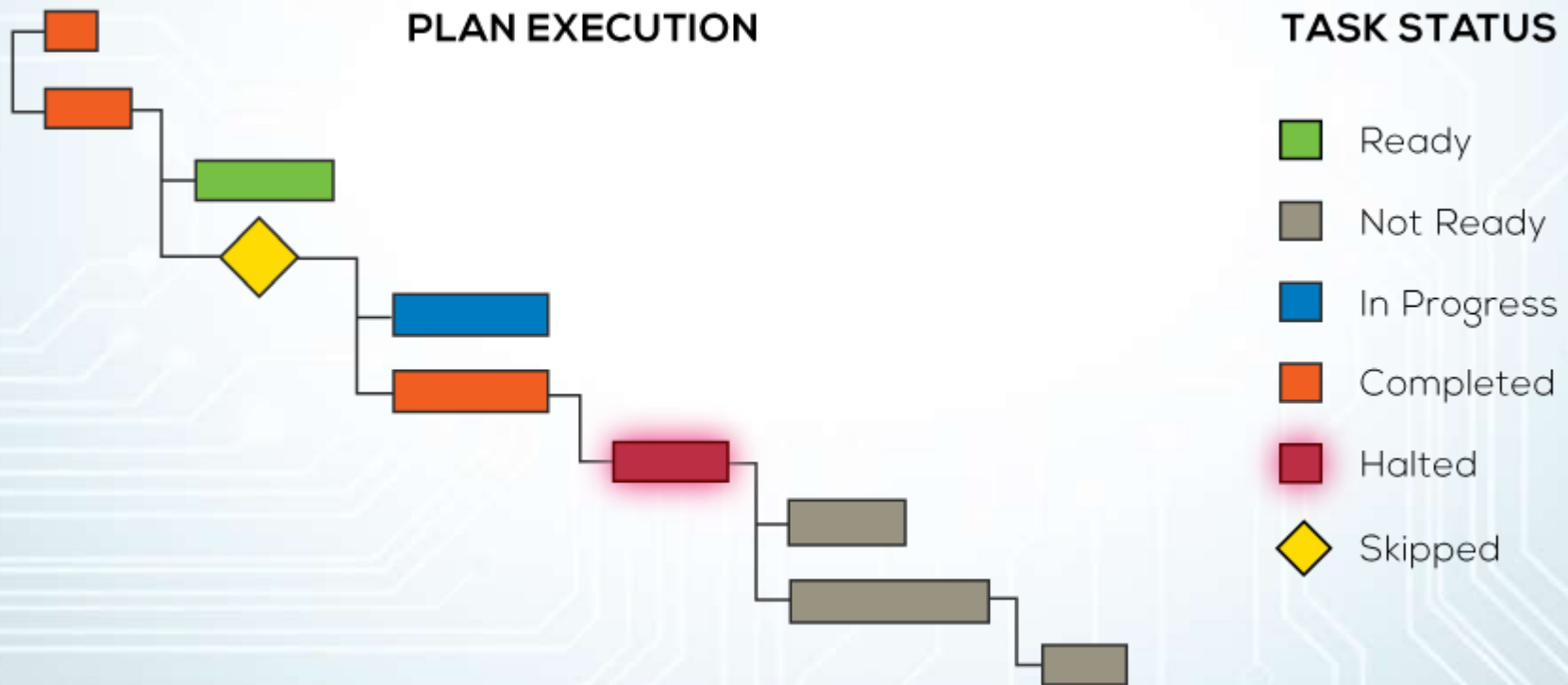
Service is up & verified



Executives Sr. Managers

Are we done yet?

Real-Time Task Status



Why DR Test - **Manageability**

Monitor, Measure - Manage

Monitor Plans/Infrastructure/Services

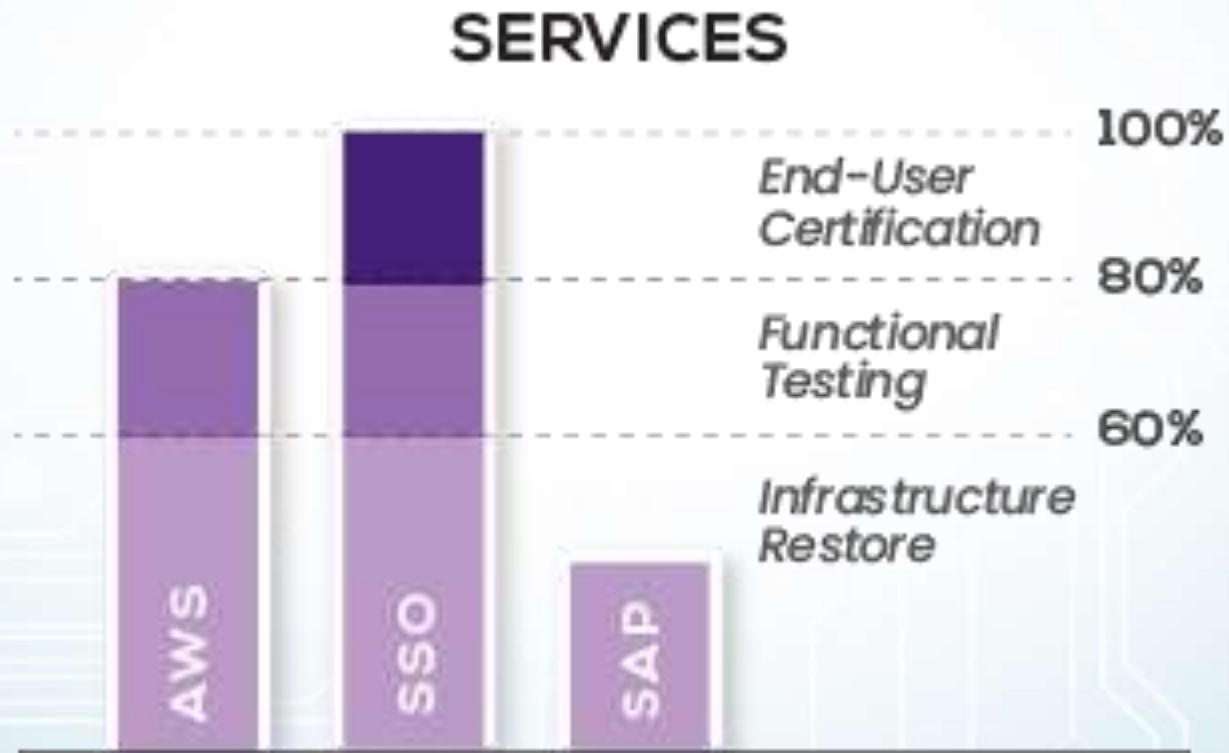
Measure Real-time Progress

Issue Management

Dashboards

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Monitor, Measure - Manage



Why DR Test - **Gap Analysis**

Plan Assumptions

Scenarios

Dependencies – CI Relationship

Resource Planning

Recovery Time vs. RTC History

DR Test - **Test Types**

Plan Walkthrough – Individual Plan

Tabletop Exercise

Simulation w/ Alt Infrastructure

-

-

DR Test – **Phases**

Objective Setting

Test Preparations

Exercising

Reporting Outcome

DR Test Phase – **Objective Setting**

Management Objective

Scenarios / Plans

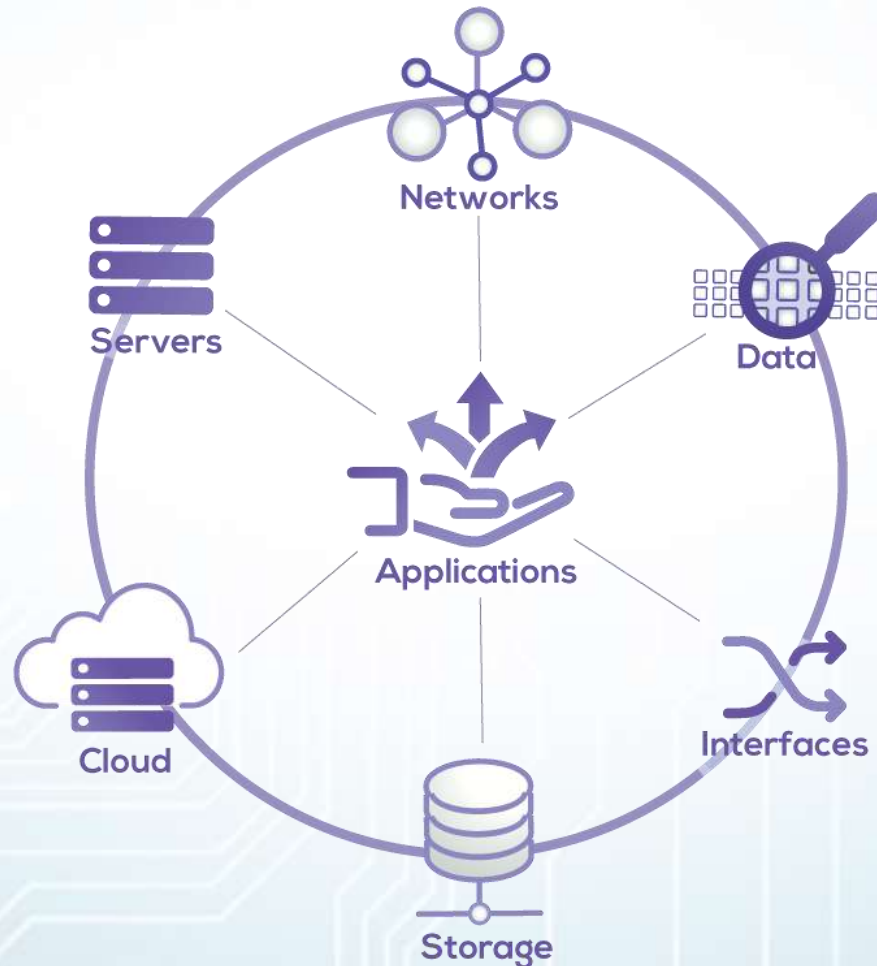
Infrastructure Systems

Applications / Services / Interfaces

Establishing RTC vs. RTO

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Application – Dependency & Interfaces



DR Test Phase – **Test Preparation**

Plan Content Review

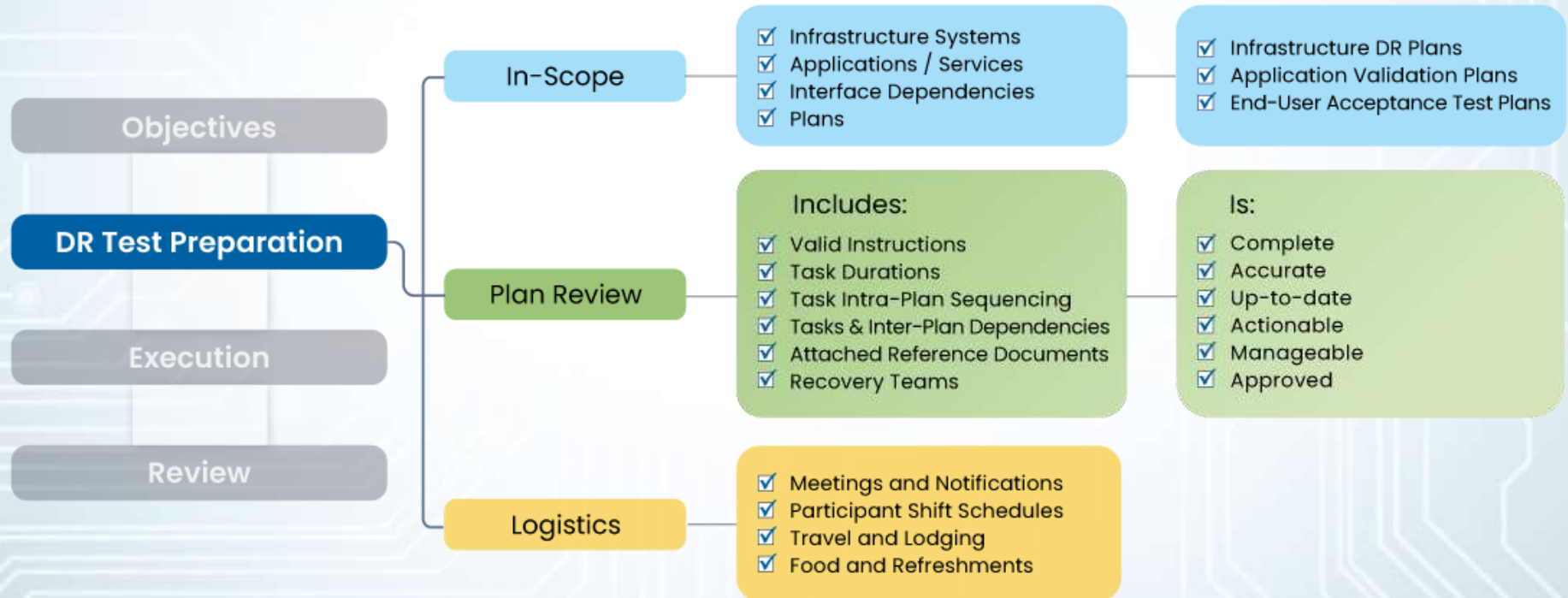
Inter & Intra Plan Dependencies

Interface Dependencies

Resource (Staff) Planning

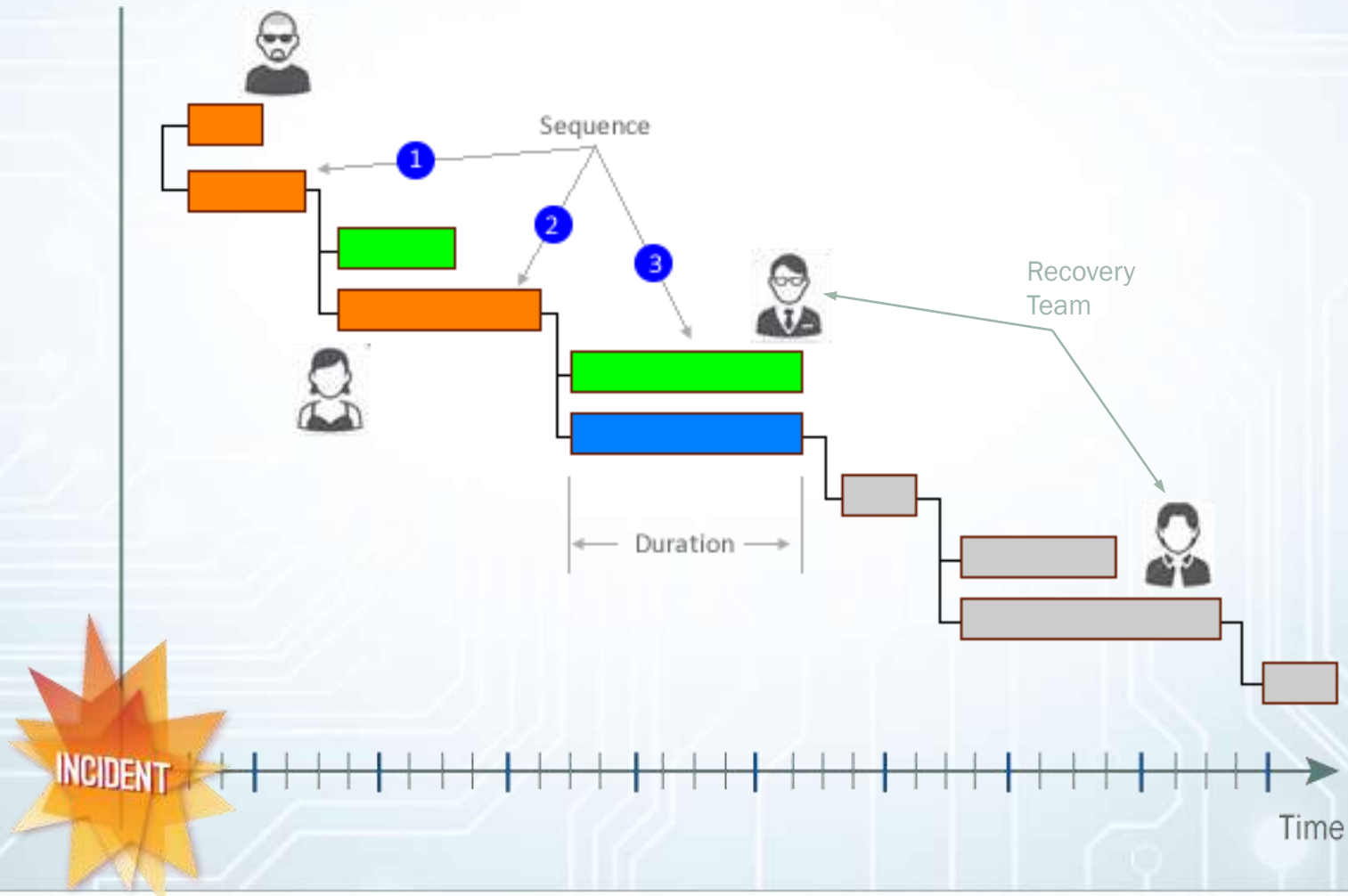
Logistics

DR Test – **Test Preparation**

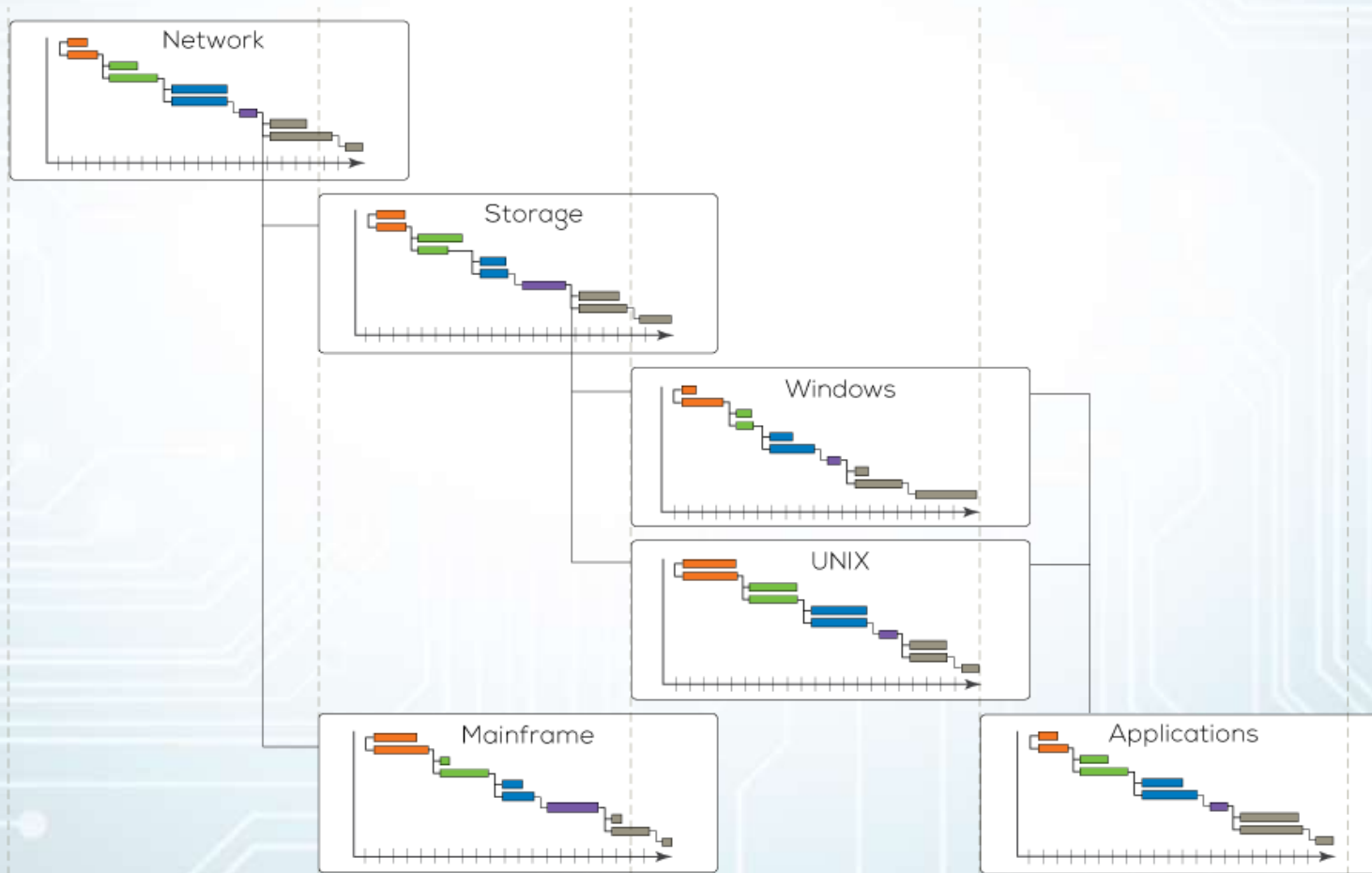


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DR Test – **Test Preparation**

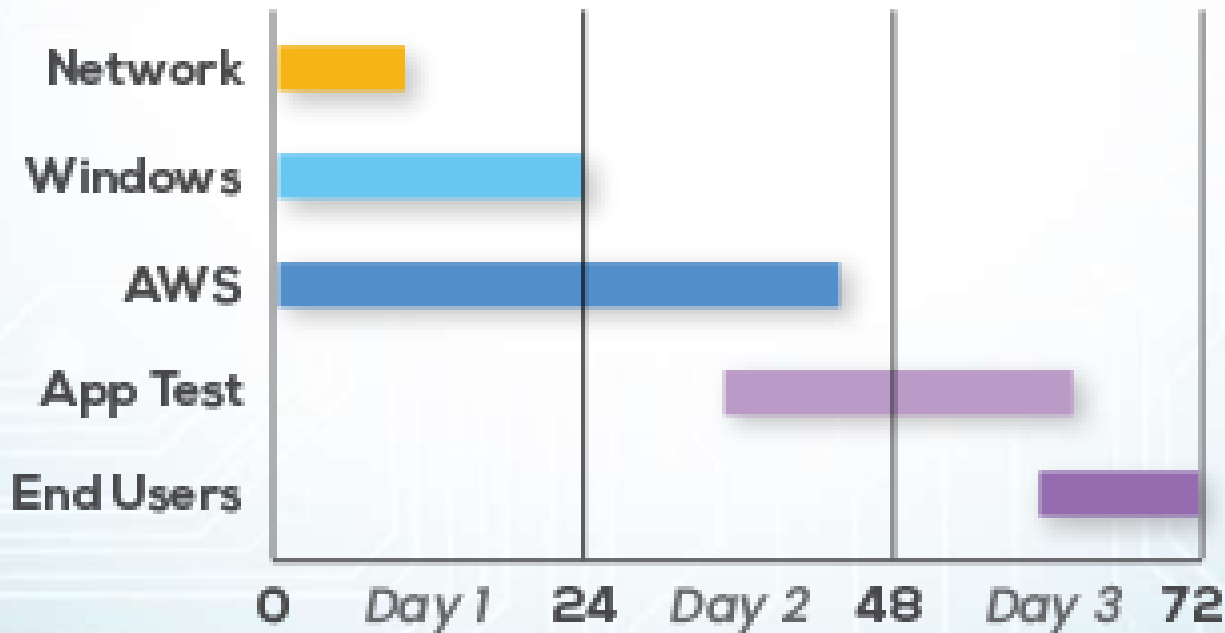


DR Test – **Test Preparation**



DR Test – **Test Preparation**

STAFF SCHEDULE



DR Test Phase – **Exercising /Orchestrating**

Setup EOC / NOC

Plan & Resource (Staff) Activation

Task Allocation & Management

Issue Management

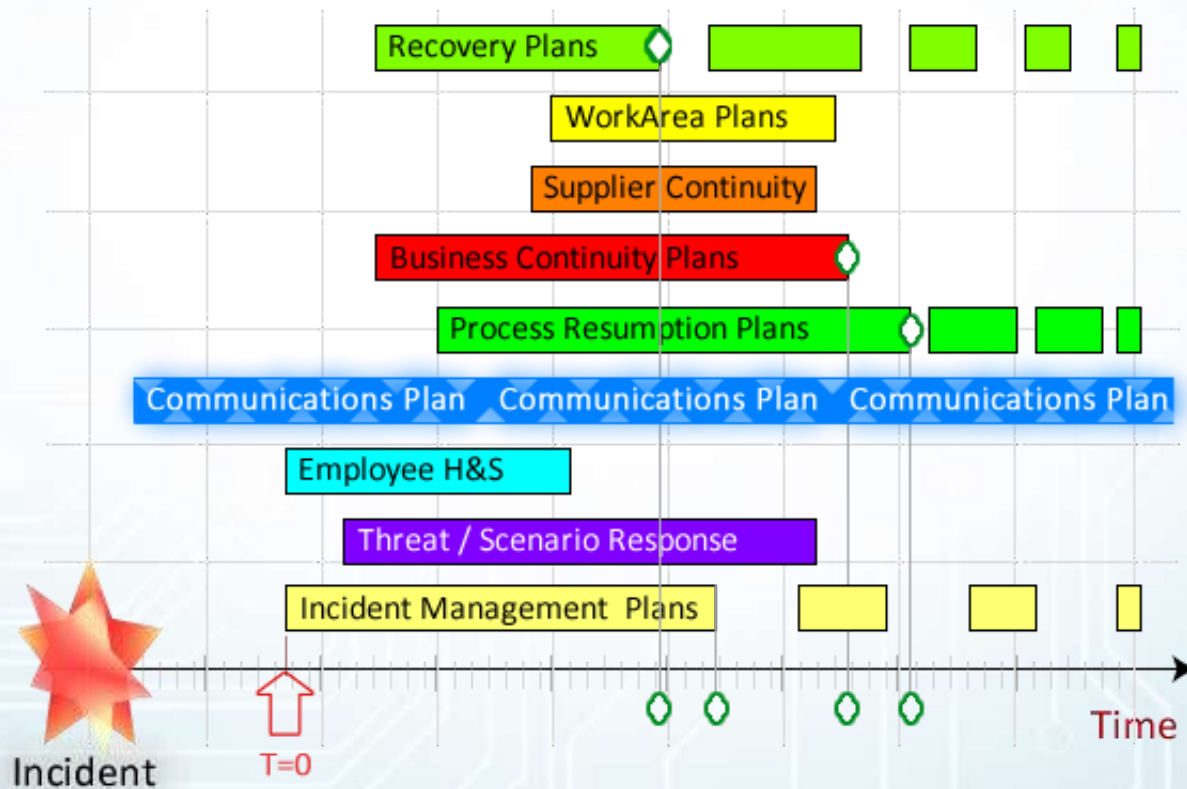
Event / Time Tracking

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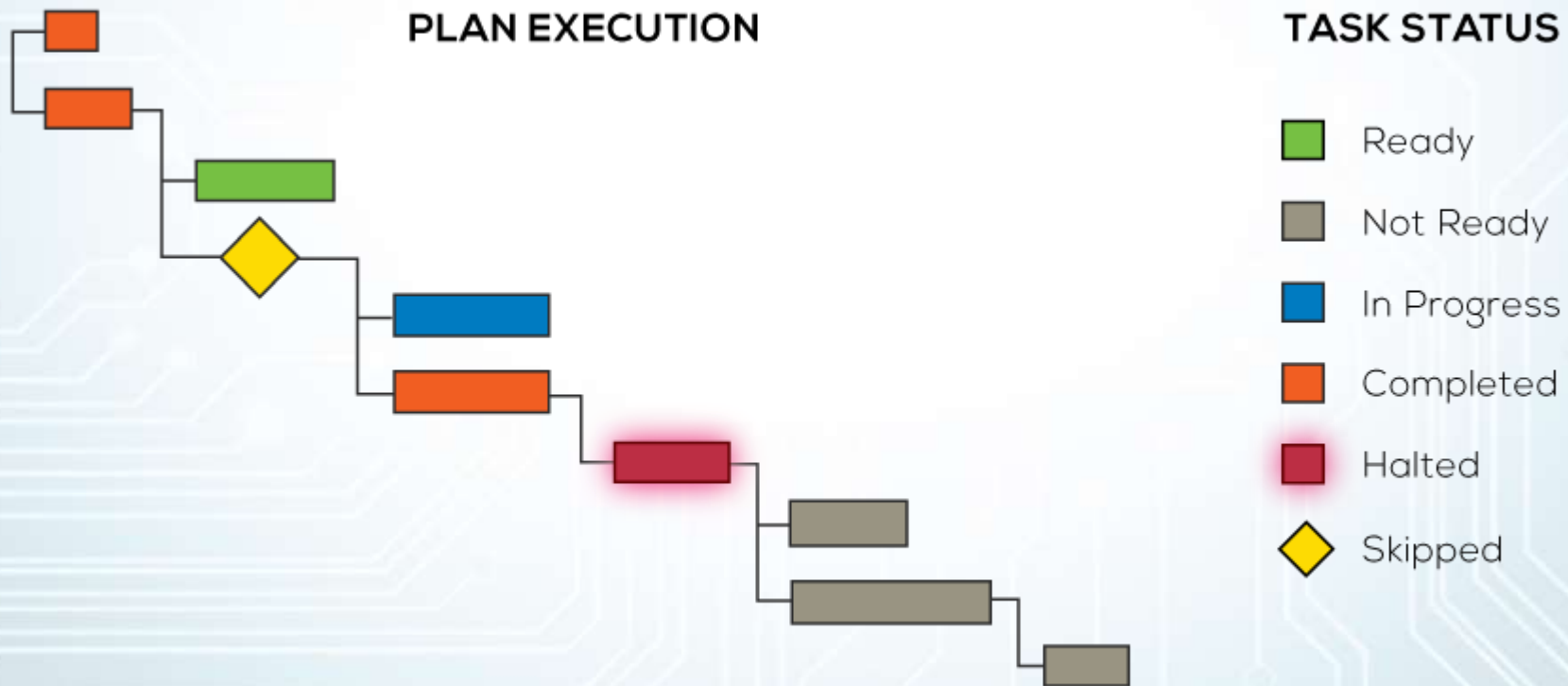
DR Test Lifecycle



Exercising – Plan Activation



Exercising – Task Allocation & Management



Exercising - Monitoring & Measuring

You can't manage what you don't measure

Infrastructure - Servers / Storage / dB

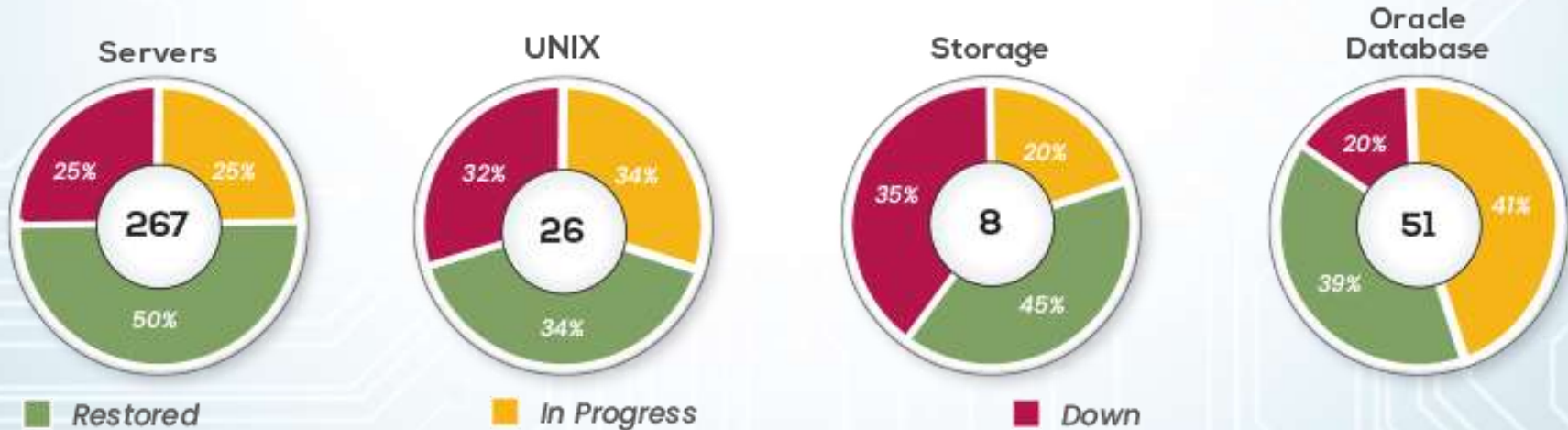
Plan Completion Status

Application Restoration Status

Estimated Recovery Time vs. RTO

DR Test Phase – **Monitoring & Measuring**

Infrastructure - Servers / Storage / dB



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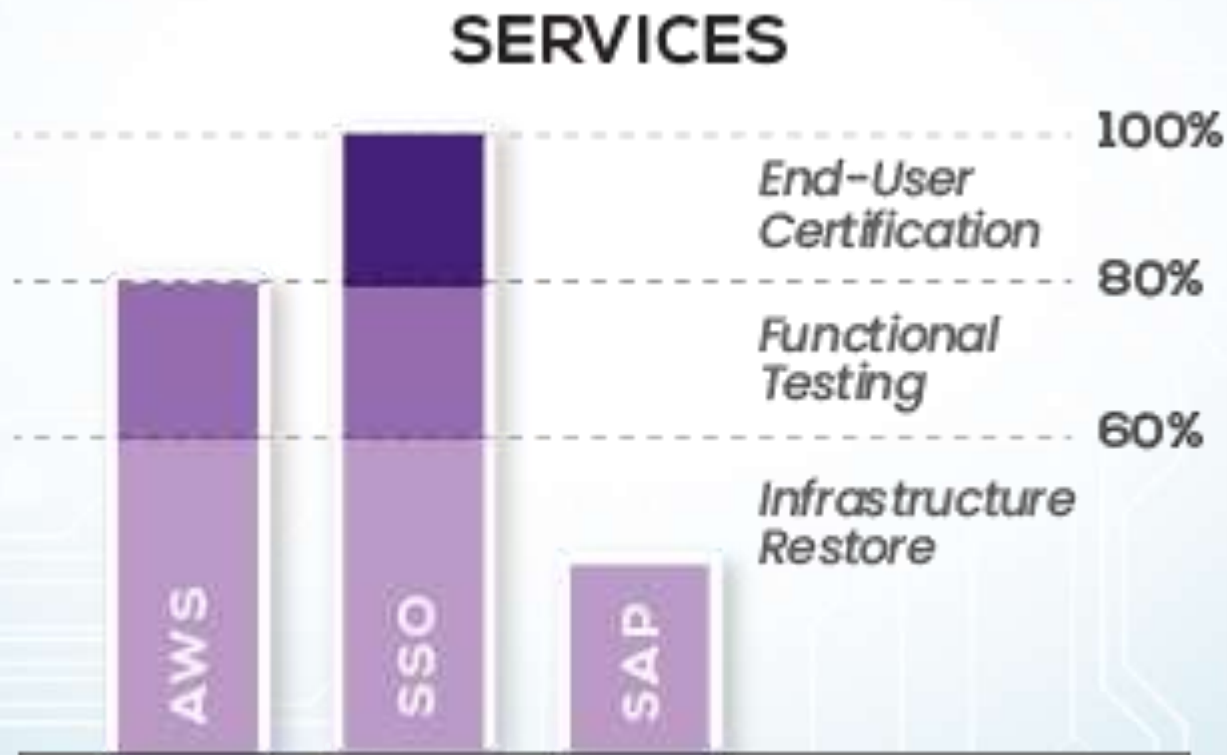
DR Test Phase – **Monitoring & Measuring**

DR PLAN MONITOR



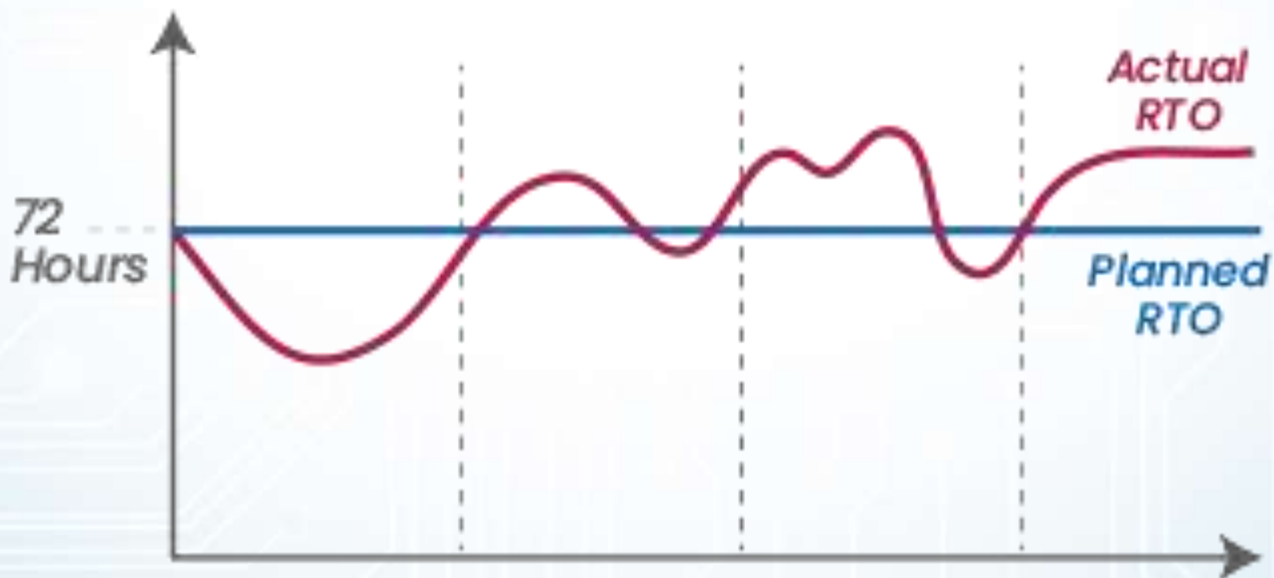
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DR Test Phase – **Monitoring & Measuring**



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RTO TRACKER



DR Test Phase – **Reporting Outcome**

% Completion – Infra / Plans / Services

RTC vs. RTO (history)

Plan Completeness

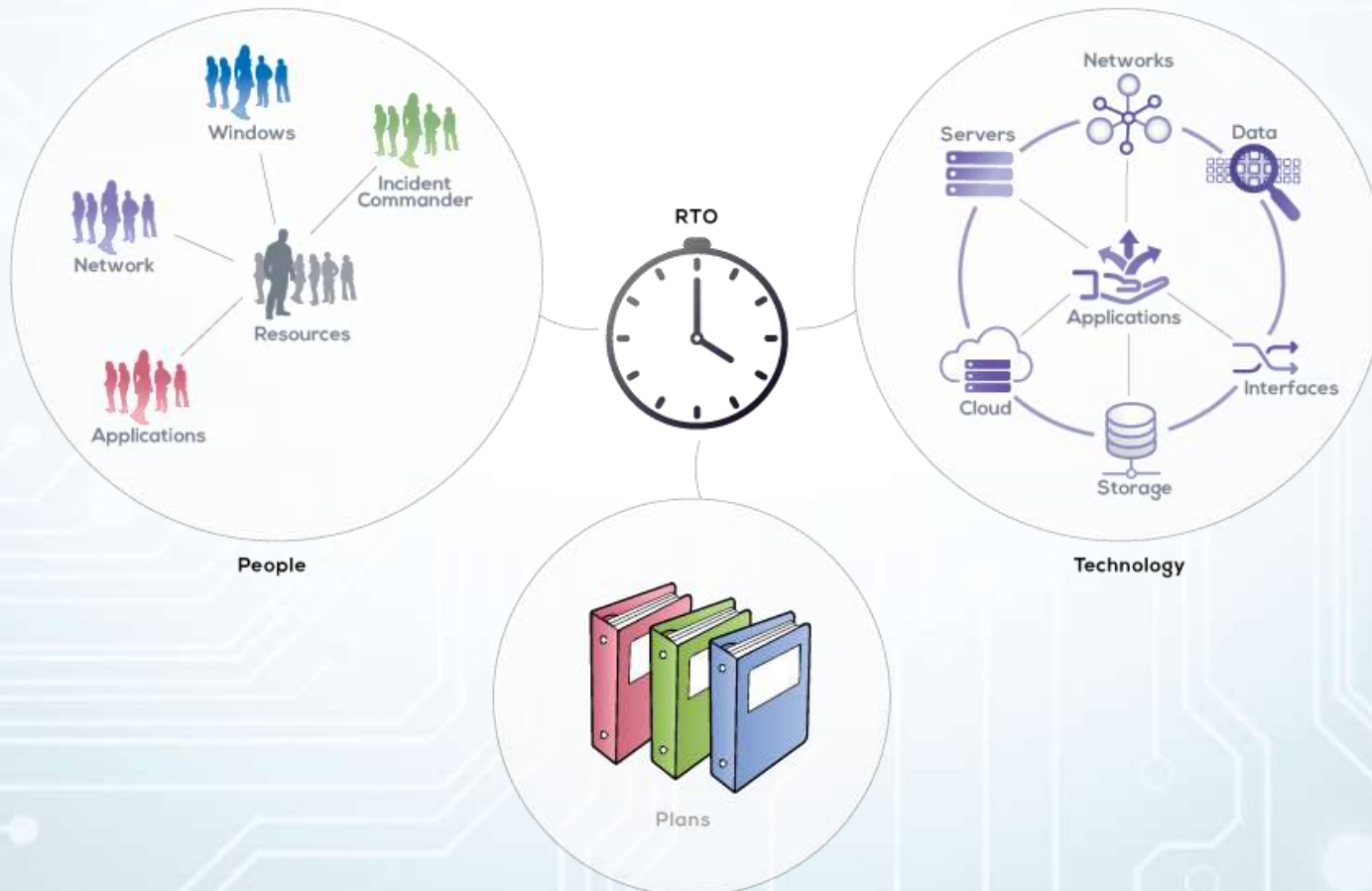
Staff Skill / Proficiency

Issues & Gaps

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Orchestrating a Disaster Recovery Test

Orchestration – Complex Systems



Orchestration

Arrangement, Inherent Intelligence

Coordination & Management

Automation for complex systems

Minimize Manual intervention

Orchestration

Software System / Platform

Purpose Built for DR Orchestration

eBRP Suite - CommandCentre


































Command, Control & Communications

Orchestrating a Disaster Recovery Test

Orchestration - Arrangement, Inherent Intelligence

- [-] Infrastructure DR Plans
 - [+] 00 Infrastructure Recovery - Start
 - [+] 02 TO Disaster Recovery Command Center Infrastructure
 - [+] 03 TO Disaster Recovery Command Center
 - [+] 10 EAI Datapower Plan
 - [+] 15 Enterprise Database
 - [+] 20 Enterprise Systems Control
 - [+] 25 Mainframe
 - [+] 30 Network
 - [+] 35 Network Security
 - [+] 40 SAP Basis
 - [+] 45 SAP Database
 - [+] 50 Storage 3PAR
 - [+] 55 Storage Plan
 - [+] 60 TSM
 - [+] 65 Unix
 - [+] 70 Windows/Linux
 - [+] 99 Infrastructure Recovery - End
- [+] Application DR Plans
- [+] Client Test Plans

Orchestrating a Disaster Recovery Test

-  **Plan**
 -  Infrastructure DR Plans
 -  00 Infrastructure Recovery - Start
 -  02 TO Disaster Recovery Command Center Infrastructure
 -  03 TO Disaster Recovery Command Center
 -  10 EAI Datapower Plan
 -  15 Enterprise Database
 -  20 Enterprise Systems Control
 -  25 Mainframe
 -  30 Network
 -  35 Network Security
 -  40 SAP Basis
 -  45 SAP Database
 -  50 Storage 3PAR
 -  55 Storage Plan
 -  60 TSM
 -  65 Unix
 -  70 Windows/Linux
 -  1 Windows Recovery - Start
 -  2 Config Management Systems
 -  2.1 VM Hosts
 -  2.2 vCenter
 -  2.3 vRanger
 -  2.4 VPN
 -  2.5 Netscaler
 -  3 Windows - Powershell Script
 -  4 Windows Tier 1 Recovery
 -  5 Windows Tier 2 Recovery
 -  6 Windows Tier 3 Recovery
 -  99 Windows Recovery - End
 -  99 Infrastructure Recovery - End
 -  Application DR Plans
 -  Client Test Plans

Orchestration – Plan Scope

Plan: 70 Windows/Linux
Plan Group: Infrastructure DR Plans

General Description File **Scope** Archive Action >>

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Scope

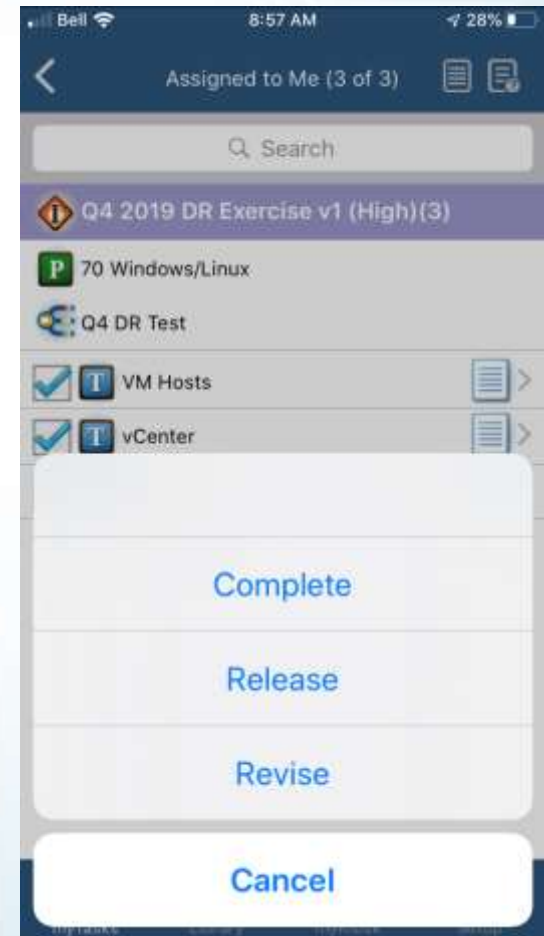
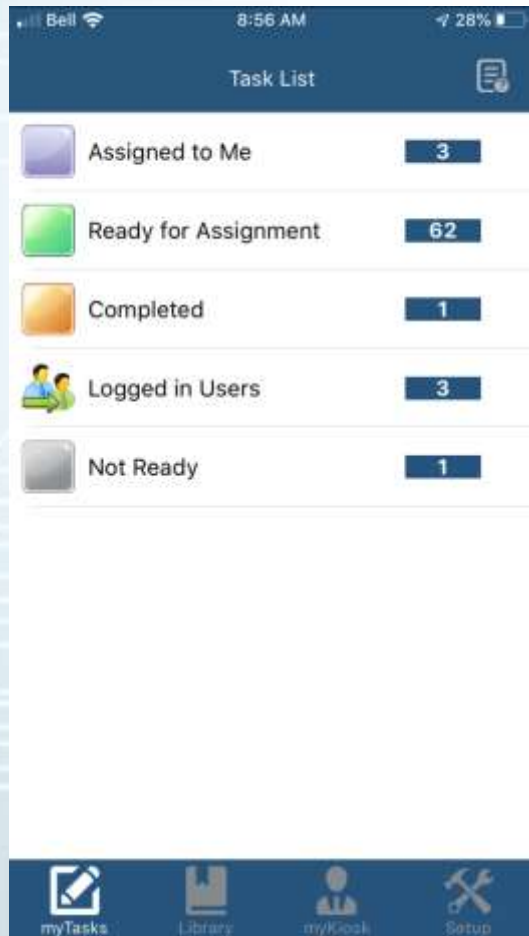
Entity Type	Entity Name	Entity ID	Entity Group
Server	aixdc177	e9bd68f86f74ad402a02f017ad3ee427	Unix
Server	aixdc253	98fb44786ff0ad402a02f017ad3ee4db	Unix
Server	aixdc253	2925407c6ff42940bfb0a38fae3ee445	Unix
Server	aixdc263	b75cc8346f382940bfb0a38fae3ee4cf	Unix
Server	aixdc263	4d4484f06ff0ad402a02f017ad3ee457	Unix
Server	aixdc400m	58f11e4b6f75a280cb78e2300b3ee48b	Unix
Server	aixdc401m	932750106f5416005ef2883e6b3ee478	Unix
Server	aixdc401m	fad5d41c6fdc1600f97d0246eb3ee450	Unix
Server	aixdc402m	b827d0dc6f1416005ef2883e6b3ee4c4	Unix
Server	aixdc402m	1ae1520b6f75a280cb78e2300b3ee436	Unix
Server	aixdc403m	99ccd9b56fb20640bfb0a38fae3ee451	Unix
Server	bnapl0002	8f5fc4eb6f242d402a02f017ad3ee418	Linux
Server	camp10001	401d125c6f6ee140bfb0a38fae3ee48a	Linux
Server	camp10002	3bad529c6f2ead002a02f017ad3ee428	Linux
Server	DMAP2@aixac143	8f9a173b6f5aa240cb78e2300b3ee457	Application
Server	DMAP2@aixdc143	37e8cd656f0eb6c8cb78e2300b3ee402	Application
Server	dmapl0002	e08023d06f816e885ef2883e6b3ee495	Linux
Server	ecdcadms05	601dc87c6ff0ad402a02f017ad3ee475	Windows
Server	ecdcamsadms01	e43cac786f74ad402a02f017ad3ee4c5	Windows
Server	ecdcamsftprms01	6d4e0fa46ff6b184f2334ecbbb3ee4ff	Windows

Orchestrating a Disaster Recovery Test

Orchestration - Scenarios

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Orchestration – Mobile Accessibility



Orchestrating a Disaster Recovery Test

In Conclusion

Disaster Recovery Test

Build Skills & Muscle Memory

Awareness & Visibility

Program Credibility

Be Prepared

Orchestrating a Disaster Recovery Test



Thank You