

Proactive customer notification for network-incident resolution

Telecommunications Assurance Workflows

Managing the growing complexity of network monitoring data

The evolution of core network technology over the years, coupled with the introduction of 5G technology, has led to a significant increase in the number of network monitoring tools used by communications service providers (CSPs).

Network monitoring tools are leveraged extensively by network operations teams in the NOC to poll data from different network resources in a CSP's landscape. These tools identify the network resource, provide a view of network topology and, in most cases, monitor key performance metrics based on incoming events. The challenge is multiplied because most CSPs support multiple monitoring tools.

While network monitoring tools have context of the physical resource (e.g. port, router, link, etc.), they may not have service application visibility and almost no context of the customers using the device. This disconnect between the network data, service application and customer data can ultimately lead to a bad service experience and an unsatisfied customer.

Telecommunications Service Management supports Telecom Assurance Workflows to enable CSPs to proactively notify customers for network-related issues—all within a single workflow.

Before	Value	After
45 minutes	Notification time	< 5 minutes
100s for the same set of events	Incidents created	One with associated primary and secondary alert
Customer NPS -1	Support	Customer NPS 22

Chart 1: Comparison of major value drivers achieved in Tier 1 CSP when Telecom Assurance Workflows are used

How Telecom Assurance Workflows work

Telecom Assurance Workflows simplify the process of proactively notifying customers about network-related issues. With this capability, you can:

1. Gain service operations management functionality

Telecommunications Service Operations Management leverages existing monitoring systems to collect, correlate and de-duplicate network event data and then intelligently analyzes anomalies using AIOps.

2. Categorize and prioritize incidents

Based on the identified alerts, incidents can be opened in the right category and priority, associating alerts against them. For example, an event storm generating 1,000 events per second would create a single incident with all other events associated as secondary to the primary alert.

Why ServiceNow Telecom Assurance Workflows:

- Best practice out-of-the-box workflows for incidents and service changes
- Detect and resolve issues early
- Initiate case associated to customer from network incident
- Track updates between incidents, cases and work orders
- Single pane for service resolution with service-aware CMDB

Customer use case



Reduce OpEx

Using Telecom Assurance Workflows for routing the entire issue resolution process has proven to reduce cost of operations by 45% for a Tier 1 CSP in EMEA.



Increase NPS

The CSP also saw a dramatic increase in customer NPS for its enterprise customers, shifting from a negative value to a positive 22 NPS score.

3. View impacted services and customers in a single pane

Once an incident is created, CSPs can identify affected customers and services using our centralized, service-aware CMDB. The CSP now has a single view of the alert, incident and impact providing end-to-end visibility.

4. Create individual customer cases

Individual customer cases can be created based on customer priority and preference. Care agents can now view service-impacting network events and the steps taken by the NOC team to resolve them. More importantly, the customer is proactively notified about the network event using their preferred channel. And it's quick: all this happens within minutes of the incident being created.

5. Follow along the entire resolution process

Care agents have full visibility of the case status and can track resolution progress such as changes, escalations, work order dispatches, etc. in a single pane view. As the case status is updated, the customer can either be notified along the way or view the status on their care portal.

6. Verify and close

Once the case is resolved, the care agent's last step is to verify resolution with the customer and close the associated case.

Telecom Assurance Workflows

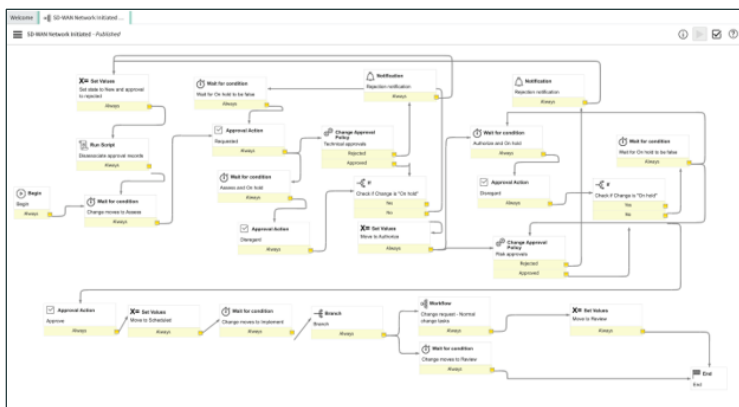


Image 1: Out-of-the-box Telecom Assurance Workflows

Number	Account	Name	Configuration Item
IBITM-0001020	Bank CA	IB Bank CA 5000-1	CI Bank CA 5000-1
IBITM-0001023	Bank SF	IB Connectivity (SD-WAN)	Connectivity (SD-WAN)
IBITM0001021	Bank CA	IB Connectivity (SD-WAN)	Connectivity (SD-WAN)
IBITM0001025	Bank SJ	IB Connectivity (SD-WAN)	Connectivity (SD-WAN)

Image 2: CSP's dashboard showing an alert and root cause of impacted services associated to the configuration item (CI)

Learn more

For more information about ServiceNow Telecommunications Service Management visit <https://www.servicenow.com/products/telecommunications-service-management.html> or learn more about ServiceNow solutions for communications service providers at <https://www.servicenow.com/telecom>.

