TM Forum

ANLAV Report

Globe

HVS: GB1059A – RAN Fault Management

Version: 2.1.0

Maturity Level: General Availability (GA)

Score: 3.23

ANLAV Report: Globe – RAN Fault Management
First Review Cycle - 21 November 2025

First Review Cycle

ANLAV Report: Globe – RAN Fault Management
Executive Summary of First Review Cycle - 21 November 2025

The joint Globe + HT RAN Fault Management solution shows a strong, higher AN Level-aligned characteristics for the Equipment, Communications and Environmental sub-scenarios, with solid evidence of highly automated data collection and alarm filtering, predictive risk identification, impact-aware ticketing via Mycom NetExpert, and advanced solution generation, evaluation and execution—mainly however through CODC for cell outage compensation and the precise handling of fronthaul fiber cuts. The implementation is not yet fully evidenced as *intent-driven* (Q1), since there is no clear lifecycle where operator business intents are captured, translated into FM targets and policies, and automatically evaluated for fulfilment, so Q1 is validated at Option B for the sub-scenarios. In general, we should see more use cases per sub-scenario and all sub-scenarios should be included but taken in account the low number of process faults it is accepted.

Overall, the solution is mature but the explicit intent layer and the end-to-end closed loop need to be strengthened, and a few additional multi-alarm and multi-solution examples are required, to fully justify all of Globe's current scores. Current score is **3.23.**

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First Review Cycle - 21 November 2025

Capability Area	Capability	Score Claimed	Score Validated	Provided Evidence	TMF (GB1059A) requirements	Questions
Intent	Intent-Driven	Equipment: A Communications:A Environmental:A Security:B	**B**	The evidence shows a well-automated alarm–ticket–work-order–closure chain, but not a true intent-driven model. There are no explicit business intents being captured and converted into FM targets and policies, nor clear automatic evaluation of whether those intents are met. Therefore, the implementation is consistent with Option B for Equipment, Communications and Environmental sub-scenarios, while for Security (Key Expired) only basic detection/notification is shown and the capability can be validated between B & C.	Does the wireless network fault management system have the capability of automatically generating fault management task targets, policies and evaluating the implementation effect based on intent? Note: Based on the specified fault management intent (such as the out-of-service duration), the system determine the fault management targets (such as the proportion of pre-event trouble tickets and fault locating duration) and fault management policy (such as redundancy backup) A: The system automatically generates fault management task targets and policies based on intent. Fault management targets and policies need to be manually confirmed. The system automatically evaluates the implementation effect. B: The system automatically generates fault management task targets based on predefined rules. Fault management targets and policies need to be manually defined. The effect is manually evaluated after the intent is implemented.	To support **Option A** (Equipment, Communications, Environmental) and **Option B** (Security), we would need: Examples of **explicit FM intents** being entered (e.g. “keep OOS per site < X minutes”, “minimise traffic loss during power outages”, “no service interruption due to certificate expiry”), ideally with UI/API screenshots. Evidence that these intents are **automatically translated into FM targets and policies** (SLA/KPI targets, alarm thresholds, ticket SLOs, etc.), rather than manually configured one by one. Dashboards or reports where the system **automatically evaluates whether each intent is met**, showing achieved vs target and any violations. For **Key Expired**, a security-specific intent and automatic evaluation (e.g. “0 expired certs affecting production

Globe Response:

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Capability Area	Capability	Score Claimed	Score Validated	Provided Evidence	TMF (GB1059A) requirements	Questions
Awareness	Data collection & Alarm filtering	Equipment: A, Communications:A Environmental:A Security:B	Equipment: A, Communications:A Environmental:A Security:B	The platform automatically collects alarm, performance and configuration data and performs correlation and filtering as part of a highly automated incident-handling chain. This fully supports Option A for Equipment, Communications and Environmental sub-scenarios and Option B for the Security sub-scenario, where key/certificate expiry is handled via rule-based detection. Overall, the data collection and alarm filtering capability is strong and broadly aligned with the claimed scores.	The system can automatically collect data (alarm, configuration, and performance data etc.), associate alarms, and filter alarms.	

Globe Response:

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Capability Area	Capability	Score Claimed	Score Validated	Provided Evidence	TMF (GB1059A) requirements	Questions
Awareness	Fault Prediction	A	Equipment: A, Communications:A Environmental:A Security:A	Globe provides clear examples of time-based prediction for equipment, fronthaul and power-related faults, with risk lists and curves indicating the expected time window before fault occurrence. For Security, the system anticipates certificate expiry based on the stored expiration date and notifies the operator in advance, which still satisfies the core requirement of predicting the occurrence time of a fault condition. As a result, Option A can be validated for all four sub-scenarios	A: The system can automatically identify potential risks and predict the fault occurrence time based on intelligent models. For example, the system can predict that the fronthaul optical module will be faulty within XX days.	

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Capability Area	Capability	Score Claimed	Score Validated	Provided Evidence	TMF (GB1059A) requirements	Questions
Analysis	Fault identification & Impact analysis	Equipment: B, Communications:A Environmental:B Security:A	Equipment: B, Communications:B Environmental:B Security:B	Fault identification and impact analysis leverage Mycom NetExpert (SPM) to automatically determine affected resources and services and write this into tickets, clearly meeting Option B for Equipment, Communications and Environmental sub-scenarios. The fronthaul fiber-cut example is strong but still demonstrates topology/rule-based, rather than advanced “intelligent” impact models, so Option A is not fully evidenced there.	A:The system automatically identifies faults and subsequent impact based on intelligent rules. B:The system can automatically identify faults and subsequent impact based on manually defined rules, for example, identifying intermittent faults based on a frequency experience threshold and aggregating periodic alarms based on a period threshold. C:Faults and impact need to be manually identified based on expertise.	To justify the **Option A** for **Fronthaul error (Comms)**: An example showing that impact analysis is driven by an **intelligent/learning-based model**, not just static topology rules (for instance, how the system infers actual impact under partial failures or dynamic routing). Any design/architecture documentation that describes the AI/graph-based impact engine used by Mycom/NetExpert (if applicable).

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Capability Area	Capability	Score Claimed	Score Validated	Provided Evidence	TMF (GB1059A) requirements	Questions
Analysis	Demarcation & Locating	Equipment: B, Communications:A Environmental:B Security:B	Equipment: B, Communications:A Environmental:B Security:B	Demarcation and locating are particularly strong for the Communications (fronthaul) sub-scenario, where the system automatically isolates fiber cuts and provides exact cut distance from both ends, which is consistent with Option A. For Equipment and Environmental sub-scenarios, it is reasonable to assume similar mechanisms but the evidence does not clearly show multi-cause diagnosis, so Option B is more appropriate. In the Security (Key Expired) case, the root cause is simply the certificate object raising the alarm, with no demonstrated diagnosis across multiple security symptoms, so the validated level is Option B	A:The system automatically demarcates and locates faults based on intelligent models. B: The system automatically demarcates the fault or locates multiple causes based on intelligent diagnosis models. Manual confirmation is required.	No further questions

Globe Response:

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Capability Area	Capability	Score Claimed	Score Validated	Provided Evidence	TMF (GB1059A) requirements	Questions
Analysis	Solution generation	Equipment: A Communications:B Environmental:A Security:A	Equipment: A Communications:B Environmental:A Security:A	For Equipment, the CODC example demonstrates that the system automatically generates an optimal RF compensation strategy for cell/site outages, which fully supports Option A. For Communications, the system automatically suggests recovery options for fronthaul issues but requires manual confirmation, matching Option B. External power supply failures appear to follow the same suggestion model, but there is no clear evidence of optimal solution selection, but Option A is more defensible than B. For Security (Key Expired), no automatic recovery solution is shown beyond notifying the user, so this sub-scenario can be option A.	A: The system automatically generates the optimal recovery or fault rectification solution through intelligent analysis, such as the neighboring cell RF compensation recovery solution. B:The system automatically generates multiple possible recovery or rectification solutions, such as the remote recovery solution, neighboring cell RF compensation service recovery solution. Manual confirmation is required.	

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Capability Area	Capability	Score Claimed	Score Validated	Provided Evidence	TMF (GB1059A) requirements	Questions
Decision	Evaluation & Decision making	Equipment: A Communications:B Environmental:A Security:A	Equipment: A Communications:B Environmental:A Security:A	In evaluation and decision-making, CODC again satisfies Option A on the Equipment and enviromenta side, with the system evaluating the impact of the compensation strategy using KPIs and automatically deciding to apply it. For Communications, the platform evaluates solution options but still requires human confirmation before choosing the final action, which is consistent with Option B. enviromental. For Security, only alerting on impending key expiry is documented but is accepted.	A: The system automatically evaluates and determines the optimal recovery or fault rectification solution through intelligent analysis, such as the neighboring cell RF compensation recovery solution. B:The system automatically evaluates multiple possible recovery or rectification solutions, such as the remote recovery solution, neighboring cell RF compensation service recovery solution Manual confirmation is required	For External power supply failure: Do you have scenario where the system compares alternative recovery options (e.g. DG start vs FO dispatch vs reconfiguration), evaluates them using KPIs/risk/cost, and automatically decides which one to execute?

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Capability Area	Capability	Score Claimed	Score Validated	Provided Evidence	TMF (GB1059A) requirements	Questions
Execution	Solution implementation	A	Equipment: A Communications:A Environmental:A Security:B	Solution implementation is robust for Equipment and Communications: CODC runs compensation commands automatically and verifies KPI improvement, while for fiber cuts the system generates precise work orders with cut locations, enabling effective one-shot FO interventions and automated closure, all consistent with Option A. For Environmental power failures, the same mechanisms are claimed and are acceptable as Option A, though a concrete example would be helpful. In the Security (Key Expired) sub-scenario, however, the evidence only shows notification to the user, without any automated execution or structured implementation workflow, so the validated level there is Option B.	A:The system can automatically execute instructions. B: Humans use the system to execute instructions.	To justify Option A for Key Expired: Provide a flow showing how the system executes the chosen remediation for certificate/key expiry, for example: Automatic certificate renewal via integrated PKI and distribution to all affected nodes/services

China Unicom Response:

Thank you

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Globe RAN Fault Management Assessment Evidence

1. Overall policies for sub-scenarios
2. Assessment results
3. Evidence for different sub-scenarios

Sub-scenario Proportion Evidence

sub-scenarios	Root Cause	Count	Proportion
Equipment	Transceiver problem	8153	13%
	Receiver Failure	0	0%
Processing Error	Invalid parameter	265	0.42%
	Activity reason	535	0.8%
Communications	Fronthaul error	3701	5.87%
	Antenna feeder error	4046	6.42%
	Backhaul error	60	0.1%
	IP/GPS clock error	114	0.18%
Environmental	External power supply failure	42,720	67.75%
	External equipment failure	496	0.8%
Security	Key Expired	0	0%
	Authentication Failure	0	0%
	Unauthorized Access Attempt	994	1.6%
Others	Other	1970	3%
Total		63054	100%

Select 4 scenarios to provide evidence

(95.61%)

Noted: Selected issues in all Territories from January to October 2025.

Sub-scenario selecting Policies:

1. **Sub-scenario selection:** Only choose 4 sub-scenarios, with a total weight of 95%+
2. **Evidence provision:** Choose the fault type with the highest proportion in each sub-scenario for evidence provision

Overall Score

High-Value Scenario	Cognitive Activity (IAADE)	Service Capability	Weight	Question	Method 1: Average (Official use)																							final score
					Criteria				Answer					Equipment (should include but not limit to Transceiver problem, Receiver Failure)			Processing Error (should include but not limit to Invalid parameter, Software Environment Problem)			Communications (should include but not limit to Fronthaul error, Backhaul error, IP/GPS clock error, Antenna feeder error)			Environmental (should include but not limit to External power supply failure, External equipment failure)			Security (should include but not limit to Key Expired, Authentication Failure, Unauthorised Access Attempt)			
														15%			0%			13%			70%			2%			
					Option	Option	Option	Option	Equipme	Processi	Commun	Environ	Security	Original	Compen	Overall	Original	Compen	Overall	Original	Compen	Overall	Original	Compen	Overall	Original	Compen	Overall	
Wireless Network Fault Management	Intent	Intent-driven	10%	Does the wireless network fault management system have the capability of automatically generating fault management task targets 、 policies and evaluating the implementation effect based on intent? Note: Based on the specified fault management intent (such as the out-of-service duration), the system	4	3	0		B	A	B	B	B	3	3	3.24	4	4	2.93	3	3	3.21	3	3	3.24	3	3	2.95	3.23
	Awareness	Data collection & Alarm filtering	10%	Does the wireless network fault management system support automatic data collection & alarm filtering in various fault scenarios?	3	2	1	0	A	A	A	A	B	3	3.6		3	3.2		3	3.4		3	3.6		2	2		
		Fault Prediction	15%	Does the wireless network fault management system support fault prediction in various fault scenarios?	4	3	2	0	A	b	A	A	A	4	4		3	3		4	4		4	4		4	4		
	Analysis	Fault identification & Impact analysis	20%	Does the wireless network fault management system support fault identification & fault impact analysis in various fault scenarios?	3	2	0		B	B	B	B	B	2	2		2	2		2	2		2	2		2	2		
		Demarcation & Locating	20%	Does the wireless network fault management system support root cause diagnosis and fault locating in various fault scenarios?	4	3	2	0	B	B	A	B	B	3	3		3	3		4	4		3	3		3	3		
		Solution generation	10%	Does the wireless network fault management system support generation of fault recovery solutions in various scenarios?	4	3	0	0	A	B	B	A	A	4	4		3	3		3	3		4	4		4	4		
	Decision	Evaluation and decision-making	10%	Does the wireless network fault management system support evaluation and decision-making in various scenarios?	4	3	0		A	B	B	A	A	4	4		3	3		3	3		4	4		4	4		
	Execution	Solution implementation	5%	Does the wireless network fault management system support automatic execution of troubleshooting solutions in various scenarios?	2	1	0		A	A	A	A	B	2	3.6		2	3.2		2	3.4		2	3.6		1	1		

Note: The options for the sub-scenarios are determined based on the actual weights.
The weighting of sub-scenarios is adjusted based on the calculation of the trouble ticket.

Intent-driven

Question:

Does the wireless network fault management system have the capability of automatically generating fault management task targets, policies and evaluating the implementation effect based on intent?
Note:
Based on the specified fault management intent (such as the out-of-service duration), the system determine the fault management targets (such as the proportion of pre-event trouble tickets and fault locating duration) and fault management policy (such as redundancy backup).

Options:

Option A	Option B	Option C	Option D
The system automatically generates fault management task targets and policies based on **intent**. Fault management targets and policies need to be manually confirmed. The system **automatically evaluates** the implementation effect.	The system automatically generates fault management task targets based on **predefined rules**. Fault management targets and policies need to be manually defined. The effect is **manually evaluated** after the intent is implemented.	Fault management task targets and policies are manually defined based on expertise. Manually evaluate the effect after the intention is implemented.	

Answer:

Equipment	Communications	Environmental	Security
Transceiver problem	Fronthaul error	External power supply failure	Key Expired
A	A	A	B

Evidence:

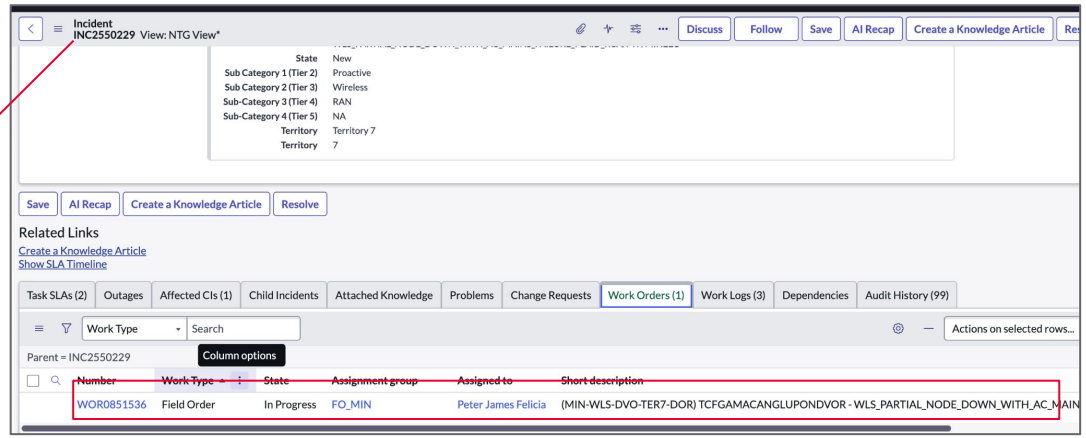
Alarm detection and correlation with ticket auto-creation

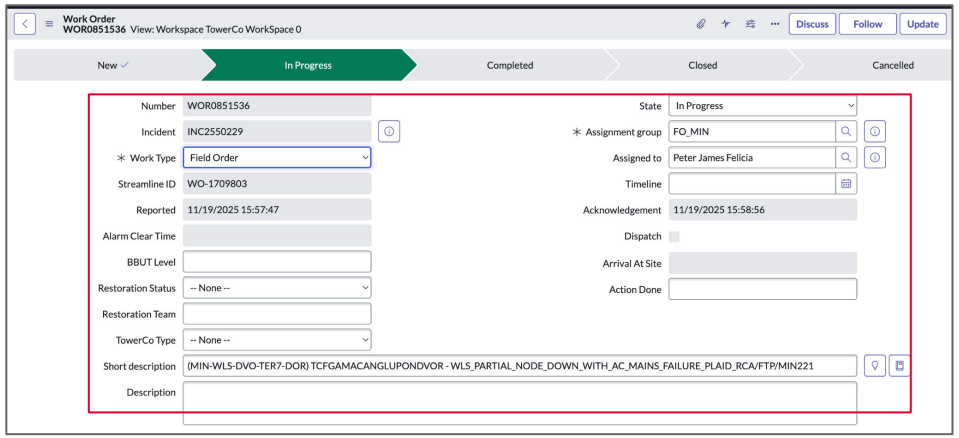
Severity	Correlates Co...	Alert Name	AMO Name	Created	Alert	Updated	TT Incident	AMO Class	AlarmType	Description
Major	5	WLS_PARTIAL_NODE_DO...	MIN221	15:57:45 2025-11-19	585034155	15:57:45 2025-11-19	INC2550229 ...	PLAID		Generated thr
Major	1	WLS_PARTIAL_NODE_DO...	MIN221	15:57:00 2025-11-19	585034042	15:57:00 2025-11-19		PLAID		WLS SITE DOW

Correlations for 585034155

Severity	Correlates Co...	Alert Name	AMO Name	Created	Alert	Updated	TT Incident	AMO Class	AlarmType	Description
Major	1	WLS_PARTIAL_NODE_DO...	MIN221	15:57:00 2025-11-19	585034042	15:57:00 2025-11-19		PLAID		WLS SITE DOW
Major	0	BTS_O&M_LINK_FAILURE	BSC-413289:BCF-1922	15:56:59 2025-11-19	585034041	15:56:59 2025-11-19		BTS	communicationsAlarm	7706|BTS O&M
Minor	2	AC_MAINS_FAILURE_PLAI...	MIN221	22:19:52 2025-11-07	579251036	09:00:24 2025-11-18	INC2467951 NE	PLAID		AC MAINS FAIL
Major	1	AC_MAINS_FAILURE_SITE_...	MRBTS-342412	22:19:52 2025-11-07	579251035	22:19:52 2025-11-07		MRBTS		AC MAINS FAIL
Major	0	MACANG_AC_MAINS_ALA...	MRBTS-342412:EQM-1:APEQM-1:CABINET-1:SMOD...	22:19:52 2025-11-07	579251034	22:19:52 2025-11-07		MRBTS_EAC	environmentalAlarm	7103|BASE STA

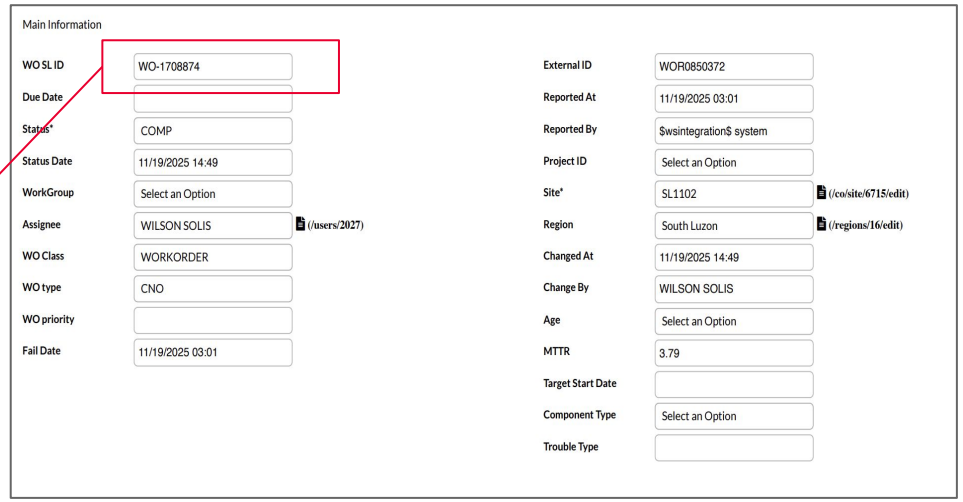
Ticket creation with workorder

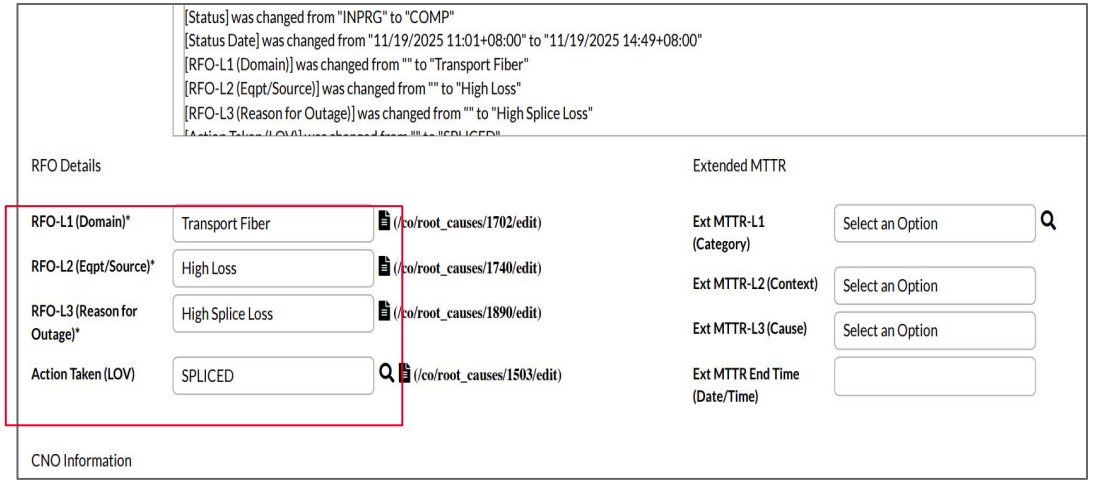




Work Order with equivalent ticket to workforce management (Streamline)

Streamline triggers closure process which sends details to the ServiceNow work order and auto-populates the L1/L2 root cause





Data collection & Alarm filtering

Question:

Does the wireless network fault management system support automatic data collection & alarm filtering in various fault scenarios?

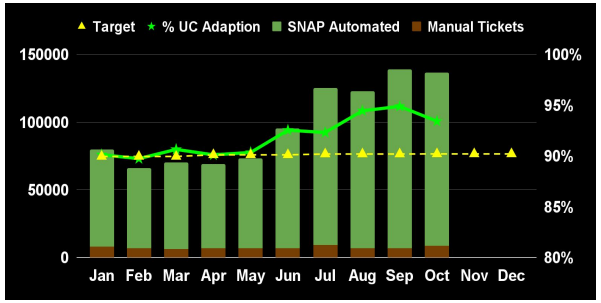
Options:

Option A	Option B	Option C	Option D
The system can automatically collect data (alarm, configuration, and performance data etc.), associate alarms, and filter alarms.	The system can automatically collect data (alarm, configuration, and performance data etc.), associate alarms, and filter alarms based on **manually defined rules**	Manually select and use the system to collect data and filter out invalid/redundant alarms.	People use the system to collect data and manually filter out invalid/redundant alarms.

Answer:

Equipment	Communications	Environmental	Security
Transceiver problem	Fronthaul error	External power supply failure	Key Expired
A	A	A	B

RAN Incident handling is consistently more than 90% automated from detection & correlation up to service impact analysis.



Evidence: Data collection (Alarm data)

Transceiver problem (A)

Alert	Alert Name	Count	AMO Name	AMO Class	Severity	Ack Operator	Created	Updated	Correlat...
582564579	RADIO_RSL_LOW	1	MALRL_SL779_W980L_B...	RTN_ELEMENT	Critical		18:38:40 2025-11-13	18:38:40 2025-11-13	0
582566593	RADIO_RSL_LOW	1	LABO_SL547_W950A_TC...	ODUPort_RTN	Critical		18:43:46 2025-11-13	18:43:46 2025-11-13	0
582566594	RADIO_RSL_LOW	1	LABO_SL547_W950A_TC...	ODUPort_RTN	Critical		18:43:46 2025-11-13	18:43:46 2025-11-13	0
582595342	RADIO_RSL_LOW	1	TBNGCO-ER008-001-MI...	ODUPort_RTN	Critical		20:35:20 2025-11-13	20:35:20 2025-11-13	0
582595377	RADIO_RSL_LOW	1	ULATSE-ER008-004-SL6...	ODUPort_RTN	Critical		20:35:30 2025-11-13	20:35:30 2025-11-13	0
582601928	RADIO_RSL_LOW	1	CNAMAN-ER008-001-SL...	ODUPort_RTN	Critical		21:03:53 2025-11-13	21:03:53 2025-11-13	0
582609726	RADIO_RSL_LOW	1	RAGAY_SL1109_W950A_...	ODUPort_RTN	Critical		21:38:26 2025-11-13	21:38:26 2025-11-13	0
582609727	RADIO_RSL_LOW	1	RAGAY_SL1109_W950A_...	ODUPort_RTN	Critical		21:38:26 2025-11-13	21:38:26 2025-11-13	0
582609729	RADIO_RSL_LOW	1	RAGAY_SL1109_W950A_...	ODUPort_RTN	Critical		21:38:27 2025-11-13	21:38:27 2025-11-13	0
582609730	RADIO_RSL_LOW	1	RAGAY_SL1109_W950A_...	ODUPort_RTN	Critical		21:38:27 2025-11-13	21:38:27 2025-11-13	0
582609731	RADIO_RSL_LOW	1	RAGAY_SL1109_W950A_...	ODUPort_RTN	Critical		21:38:27 2025-11-13	21:38:27 2025-11-13	0
582609732	RADIO_RSL_LOW	1	RAGAY_SL1109_W950A_...	ODUPort_RTN	Critical		21:38:27 2025-11-13	21:38:27 2025-11-13	0
582638333	RADIO_RSL_LOW	1	BINAN3-ER008-001-SL1...	ODUPort_RTN	Critical		23:53:34 2025-11-13	23:53:34 2025-11-13	0
582643477	RADIO_RSL_LOW	1	STDOMI-ER008-001-NL1...	ODUPort_RTN	Critical		00:09:41 2025-11-14	00:09:41 2025-11-14	0
582644304	RADIO_RSL_LOW	1	BASRL_SL277_W38AX_A...	RTN_ELEMENT	Critical		00:14:35 2025-11-14	00:14:35 2025-11-14	0
582661343	RADIO_RSL_LOW	1	TAMUN_MIN864_W950...	ODUPort_RTN	Critical		01:10:59 2025-11-14	01:10:59 2025-11-14	0
582691201	RADIO_RSL_LOW	1	TCEPT_NL6229_W38AX_...	RTN_ELEMENT	Critical		02:39:46 2025-11-14	02:39:46 2025-11-14	0
582708470	RADIO_RSL_LOW	1	PUNTA_VIS4737_W950A...	ODUPort_RTN	Critical		03:10:26 2025-11-14	03:10:26 2025-11-14	0

Alert Details Property Sheet

Name	Value
Alert Name	RADIO_RSL_LOW
Alert	582564579
Manager Class	Huawei_NCE
Manager Name	Huawei_NCE-MW
AMO Class	RTN_ELEMENT
AMO Name	MALRL_SL779_W980L_BACLI_SL925:55-RFU-.
Severity	Critical
Count	1

Managed Object Property Sheet

Properties

Name	Value
Id	23213504
Manager	UNKNOWN
Name	MALRL_SL779_W980L_BACLI_SL925:55-RFU..
Class	RTN_ELEMENT
Parent	MALRL_SL779_W980L_BACLI_SL925

Fronthaul error (A)

Alert	Alert Name	Count	AMO Name	AMO Class	Severity	Ack Operator	Created	Updated	Correlat...
582577295	GNE_CONNECT_FAIL	1	TCLDC_SL6395_W950A_...	RTN_ELEMENT	Critical		19:25:19 2025-11-13	19:25:19 2025-11-13	0
582636019	GNE_CONNECT_FAIL	1	RAGAY_SL1109_W950A_...	RTN_ELEMENT	Critical		23:40:45 2025-11-13	23:40:45 2025-11-13	0
582709246	GNE_CONNECT_FAIL	1	PALOY_SL1108_W950A_...	RTN_ELEMENT	Critical		03:11:07 2025-11-14	03:11:07 2025-11-14	0
582709308	GNE_CONNECT_FAIL	1	TCPHT_SL6819_W910A_...	RTN_ELEMENT	Critical		03:11:09 2025-11-14	03:11:09 2025-11-14	0
582709364	GNE_CONNECT_FAIL	1	ALLAN_SL791_W0910_D...	RTN_ELEMENT	Critical		03:11:12 2025-11-14	03:11:12 2025-11-14	0
582709926	GNE_CONNECT_FAIL	1	MNGAL_NL233_W950A_...	RTN_ELEMENT	Critical		03:11:26 2025-11-14	03:11:26 2025-11-14	0
582710260	GNE_CONNECT_FAIL	1	GENTNO-ER009-001-NL...	RTN_ELEMENT	Critical		03:11:33 2025-11-14	03:11:33 2025-11-14	0
582711649	GNE_CONNECT_FAIL	1	INOPA_VIS446_W950A_...	RTN_ELEMENT	Critical		03:12:20 2025-11-14	03:12:20 2025-11-14	0
582712449	GNE_CONNECT_FAIL	1	SANIL_NL553_W950A_S...	RTN_ELEMENT	Critical		03:12:53 2025-11-14	03:12:53 2025-11-14	0
582712769	GNE_CONNECT_FAIL	1	MXWEST-ER008-001-NL...	RTN_ELEMENT	Critical		03:13:07 2025-11-14	03:13:07 2025-11-14	0
582712852	GNE_CONNECT_FAIL	1	BULARD-ER008-001-MI...	RTN_ELEMENT	Critical		03:13:12 2025-11-14	03:13:12 2025-11-14	0
582713101	GNE_CONNECT_FAIL	1	BAGULN-ER008-001-NL...	RTN_ELEMENT	Critical		03:13:24 2025-11-14	03:13:24 2025-11-14	0
582713114	GNE_CONNECT_FAIL	1	LBMNAN-ER008-001-SL...	RTN_ELEMENT	Critical		03:13:24 2025-11-14	03:13:24 2025-11-14	0
582713639	GNE_CONNECT_FAIL	1	PARAC_SL1094_W950A_...	RTN_ELEMENT	Critical		03:13:45 2025-11-14	03:13:45 2025-11-14	0
582713724	GNE_CONNECT_FAIL	1	AGOO_NL484_W980L_C...	RTN_ELEMENT	Critical		03:13:49 2025-11-14	03:13:49 2025-11-14	0
582713843	GNE_CONNECT_FAIL	1	VINZC_SL536_W950A_T...	RTN_ELEMENT	Critical		03:13:56 2025-11-14	03:13:56 2025-11-14	0
582714318	GNE_CONNECT_FAIL	1	TINOC_NL1553_W950A_...	RTN_ELEMENT	Critical		03:14:20 2025-11-14	03:14:20 2025-11-14	0
582714404	GNE_CONNECT_FAIL	1	EMSBAR-ER008-001-SL2...	RTN_ELEMENT	Critical		03:14:25 2025-11-14	03:14:25 2025-11-14	0

Alert Details Property Sheet

Name	Value
Alert Name	GNE_CONNECT_FAIL
Alert	582577295
Manager Class	Huawei_NCE
Manager Name	Huawei_NCE-MW
AMO Class	RTN_ELEMENT
AMO Name	TCLDC_SL6395_W950A_TCLDC_SL6643:Con...
Severity	Critical
Count	1

Managed Object Property Sheet

Properties

Name	Value
Id	23541074
Manager	UNKNOWN
Name	TCLDC_SL6395_W950A_TCLDC_SL6643:Con...
Class	RTN_ELEMENT
Parent	TCLDC_SL6395_W950A_TCLDC_SL6643

Evidence: Data collection (Alarm data)

External power supply failure (A)

Alert	Alert Name	Count	AMO Name	AMO Class	Severity	Ack Operator	Created	Updated	Correlat...
473813791	AC_MAINS_FAILURE	1	2G_SINAILAGUINMOR:b...	BTS_PORT	Critical		18:46:47 2025-02-17	18:46:47 2025-02-17	0
512994305	AC_MAINS_FAILURE	1	4G_DUNGLAYANSMARI...	eNodeB_PORT	Critical		09:19:46 2025-05-27	09:19:46 2025-05-27	0
513776213	AC_MAINS_FAILURE	1	4G_DALIGZ:enbboard-0-...	eNodeB_PORT	Critical		20:31:48 2025-05-28	20:31:48 2025-05-28	0
513995294	AC_MAINS_FAILURE	1	4G_SNMIGCFLKWY:enb...	eNodeB_PORT	Critical		08:18:56 2025-05-29	08:18:56 2025-05-29	0
518291551	AC_MAINS_FAILURE	3	2G_P5COLORADODIGO...	BTS_PORT	Critical		03:03:10 2025-06-08	14:22:34 2025-06-09	0
536579129	AC_MAINS_FAILURE	1	2G_KAGWASANPGDIAN...	BTS_PORT	Critical		10:59:51 2025-07-23	10:59:51 2025-07-23	0
538871942	AC_MAINS_FAILURE	1	5G_TCCREAGUIHWYSNA...	gNodeB_PORT	Critical		13:40:30 2025-07-28	13:40:30 2025-07-28	0
539000480	AC_MAINS_FAILURE	1	5G_VERAVILLEFHKWYR:...	gNodeB_PORT	Critical		19:45:02 2025-07-28	19:45:02 2025-07-28	0
544793530	AC_MAINS_FAILURE	1	4G_BAGOTUBIGCALACA...	eNodeB_PORT	Critical		21:06:26 2025-08-11	21:06:26 2025-08-11	0
545047541	AC_MAINS_FAILURE	1	4G_GUINOBFHLKWY:en...	eNodeB_PORT	Critical		14:42:23 2025-08-12	14:42:23 2025-08-12	0
548599579	AC_MAINS_FAILURE	1	4G_TCEDCMARAHAN1A...	eNodeB_PORT	Critical		17:14:49 2025-08-21	17:14:49 2025-08-21	0
549338250	AC_MAINS_FAILURE	1	4G_TCFGANRARDSNAN...	eNodeB_PORT	Critical		11:47:55 2025-08-23	11:47:55 2025-08-23	0
550461981	AC_MAINS_FAILURE	1	4G_SANVICENTESTOMA...	eNodeB_PORT	Critical		09:00:03 2025-08-26	09:00:03 2025-08-26	0
553241280	AC_MAINS_FAILURE	1	4G_BLGTSOUTHFHLKW...	eNodeB_PORT	Critical		12:07:13 2025-09-02	12:07:13 2025-09-02	0
555753318	AC_MAINS_FAILURE	1	4G_TCAICDALLIPAOENN...	eNodeB_PORT	Critical		06:37:09 2025-09-09	06:37:09 2025-09-09	0
555753719	AC_MAINS_FAILURE	1	4G_TCFGACADACLANSF...	eNodeB_PORT	Critical		06:40:03 2025-09-09	06:40:03 2025-09-09	0
555778295	AC_MAINS_FAILURE	1	4G_SMCSJUANRZALFLK...	eNodeB_PORT	Major		10:36:14 2025-09-09	10:36:14 2025-09-09	0
558142063	AC_MAINS_FAILURE	1	5G_CABARUANCAUAYNI...	gNodeB_PORT	Critical		19:09:38 2025-09-15	19:09:38 2025-09-15	0
558149848	AC_MAINS_FAILURE	1	4G_TCATCPOBSURSISO...	eNodeB_PORT	Critical		19:37:39 2025-09-15	19:37:39 2025-09-15	0

Alert Details Property Sheet

Name	Value
Alert Name	AC_MAINS_FAILURE
Alert	473813791
Manager Class	U2000_3GPP
Manager Name	U2000_VISMIN
AMO Class	BTS_PORT
AMO Name	2G_SINAILAGUINMOR:btsboard-0-0-19:boar...
Severity	Critical

Managed Object Property Sheet

Properties

Name	Value
Id	19172811
Manager	UNKNOWN
Name	2G_SINAILAGUINMOR:btsboard-0-0-19:boa...
Class	BTS_PORT
Parent	2G_SINAILAGUINMOR:btsboard-0-0-19:boa...

Attributes

Key Expired (B)

Alert	Alert Name	Count	AMO Name	AMO Class	Severity	Ack Operator	Created	Updated	Correlat...
582703140	CERTIFICATE_HAS_EXPIRED	1	EMS-Huawei_NCE-CPE	EMS_NCE-IP	Major		03:06:04 2025-11-14	03:06:04 2025-11-14	0
582747425	CERTIFICATE_IS_ABOUT_TO_EXPIRE	1	HC5RVTSBC02:certificat...	SBC_CERTIFICATE	Major		05:07:29 2025-11-14	05:07:29 2025-11-14	0
582750056	CERTIFICATE_IS_ABOUT_TO_EXPIRE	1	HC4RVTSBC01:certificat...	SBC_CERTIFICATE	Major		05:15:22 2025-11-14	05:15:22 2025-11-14	0
582762689	CERTIFICATE_IS_ABOUT_TO_EXPIRE	1	HC4VALSBC01:certificat...	SBC_CERTIFICATE	Major		05:46:23 2025-11-14	05:46:23 2025-11-14	0
582782625	CERTIFICATE_IS_ABOUT_TO_EXPIRE	1	HC5VALSBC02:certificat...	SBC_CERTIFICATE	Major		06:39:30 2025-11-14	06:39:30 2025-11-14	0
582709683	SSL_CERT_TO_EXPIRE	1	PITAB_NL2260_W910A_...	RTN	Critical		03:11:21 2025-11-14	03:11:21 2025-11-14	0
582712343	SSL_CERT_TO_EXPIRE	1	SJQUE_MIN960_W950A_...	RTN	Critical		03:12:49 2025-11-14	03:12:49 2025-11-14	0
582714343	SSL_CERT_TO_EXPIRE	1	PACDA_NL2102_W910A...	RTN	Critical		03:14:21 2025-11-14	03:14:21 2025-11-14	0
582714691	SSL_CERT_TO_EXPIRE	1	BAGUI_NL475_W910A_P...	RTN	Critical		03:14:42 2025-11-14	03:14:42 2025-11-14	0
582716438	SSL_CERT_TO_EXPIRE	1	ADORL_SL391_W950A_...	RTN	Critical		03:18:37 2025-11-14	03:18:37 2025-11-14	0
582718061	SSL_CERT_TO_EXPIRE	1	TCISC_VIS5806_W950A_...	RTN	Critical		03:19:21 2025-11-14	03:19:21 2025-11-14	0
582719118	SSL_CERT_TO_EXPIRE	1	LCARI_VIS698_W950A_T...	RTN	Critical		03:19:51 2025-11-14	03:19:51 2025-11-14	0

Alert Details Property Sheet

Name	Value
Alert Name	CERTIFICATE_HAS_EXPIRED
Alert	582703140
Manager Class	Huawei_NCE
Manager Name	Huawei_NCE-CPE
AMO Class	EMS_NCE-IP
AMO Name	EMS-Huawei_NCE-CPE
Severity	Major

Managed Object Property Sheet

Properties

Name	Value
Id	15203353
Manager	UNKNOWN
Name	EMS-Huawei_NCE-CPE
Class	EMS_NCE-IP
Parent	UNKNOWN

Evidence: Data collection (performance, configuration & topology data)

KPI Alarm List

Alert	Alert Name	Count	AMO Name	AMO Class	Severity	Ack Operator	Created	Updated	Correlat...
582735778	TCA_GDCR	1	CABUGCARLES-2:32157...	DNTemp-PM-TCA	Critical		04:12:39 2025-11-14	04:12:39 2025-11-14	0
582735780	TCA_GDCR_COR	1	CABUGCARLES-2	Cell	Critical		04:12:39 2025-11-14	04:12:39 2025-11-14	1
582733904	TCA_NRCSFR	1	DARANGANBNANGORZ...	DNTemp-PM-TCA	Critical		04:04:14 2025-11-14	04:04:14 2025-11-14	0
582733905	TCA_NRCSFR_COR	1	DARANGANBNANGORZ...	NRCell	Critical		04:04:14 2025-11-14	04:04:14 2025-11-14	1
582733907	TCA_NRCSFR	1	PLARIDELSNTGOISBN-4...	DNTemp-PM-TCA	Critical		04:04:14 2025-11-14	04:04:14 2025-11-14	0
582733908	TCA_NRCSFR_COR	1	PLARIDELSNTGOISBN-402	NRCell	Critical		04:04:14 2025-11-14	04:04:14 2025-11-14	1
582733901	TCA_NRCSFR	1	DARANGANBNANGORZ...	DNTemp-PM-TCA	Critical		04:04:13 2025-11-14	04:04:13 2025-11-14	0
582685576	TCA_LDDCR	1	TCFGAPAGAYBLINDOLD...	DNTemp-PM-TCA	Critical		02:13:57 2025-11-14	02:13:57 2025-11-14	0
582685577	TCA_LDDCR_COR	1	TCFGAPAGAYBLINDOLD...	eCell	Critical		02:13:57 2025-11-14	02:13:57 2025-11-14	1
582685575	TCA_LDDCR	1	TCFGAKLAYBATOLAMIT...	DNTemp-PM-TCA	Critical		02:13:56 2025-11-14	02:13:56 2025-11-14	0
582685570	TCA_LDDCR	1	TCFGABAYABAOBUTIGL...	DNTemp-PM-TCA	Critical		02:13:55 2025-11-14	02:13:55 2025-11-14	0
582685573	TCA_LDDCR_COR	1	TCFGABAYABAOBUTIGL...	eCell	Critical		02:13:55 2025-11-14	02:13:55 2025-11-14	1
582685564	TCA_LDDCR	1	MUSUANV-213:3215704...	DNTemp-PM-TCA	Critical		02:13:54 2025-11-14	02:13:54 2025-11-14	0
582685560	TCA_LDDCR	1	MAGANDALAMITNBASF...	DNTemp-PM-TCA	Critical		02:13:53 2025-11-14	02:13:53 2025-11-14	0
582685562	TCA_LDDCR	1	MAGANDALAMITNBAS...	DNTemp-PM-TCA	Critical		02:13:53 2025-11-14	02:13:53 2025-11-14	0
582685559	TCA_LDDCR	1	KLWAGISULANSKUDF-R...	DNTemp-PM-TCA	Critical		02:13:52 2025-11-14	02:13:52 2025-11-14	0
582684648	TCA_LDCSFR	1	TCMCRCHUPACBARLIG...	DNTemp-PM-TCA	Critical		02:09:48 2025-11-14	02:09:48 2025-11-14	0
582684641	TCA_LDCSFR	1	TCFGALOWERLUBOTNU...	DNTemp-PM-TCA	Critical		02:09:47 2025-11-14	02:09:47 2025-11-14	0
582684643	TCA_LDCSFR	1	TCMCRCHUPACBARLIG...	DNTemp-PM-TCA	Critical		02:09:47 2025-11-14	02:09:47 2025-11-14	0

Alert Details Property Sheet

Name	Value
Alert Name	TCA_GDCR
Alert	582735778
Manager Class	PM-TCA
Manager Name	PM-TCA
AMO Class	DNTemp-PM-TCA
AMO Name	CABUGCARLES-2:321572082
Severity	Critical

Managed Object Property Sheet

Properties

Name	Value
Id	49478788
Manager	UNKNOWN
Name	CABUGCARLES-2:321572082
Class	DNTemp-PM-TCA
Parent	CABUGCARLES-2

Attributes

Configuration Data

Alert	Alert Name	Count	AMO Name	AMO Class	Severity	Ack Operator	Created	Updated
582960087	CONFIG_HAVENOT_SAVED	1	VISAYAS:CEB_784_GPO...	GPON_Card	Major		16:03:43 2025-11-14	16:03:43 2025-11-14
582960071	LINK_LOSS	1	MINDANAO:ILG_001_GP...	GPON_PORT	Critical		16:03:42 2025-11-14	16:03:42 2025-11-14
582960058	LINK_LOSS	1	VISAYAS:ORM_006_GPO...	GPON_PORT	Critical		16:03:41 2025-11-14	16:03:41 2025-11-14
582960060	CONFIG_HAVENOT_SAVED	1	MINDANAO:ZMB_013_G...	GPON_Card	Major		16:03:41 2025-11-14	16:03:41 2025-11-14
582960048	THE_DISTRIBUTE_FIBER_IS_BROK...	1	MND_121_HYB_01:shelf...	U2000_AID	Critical		16:03:40 2025-11-14	16:03:40 2025-11-14
582960031	THE_DISTRIBUTE_FIBER_IS_BROK...	1	QCY_032_GPONA_02:sh...	U2000_AID	Critical		16:03:38 2025-11-14	16:03:38 2025-11-14
582960033	LOAM_LOS	1	VISAYAS:CEB_004_GPO...	GPON_PORT	Critical		16:03:38 2025-11-14	16:03:38 2025-11-14
582960026	THE_FEEDER_FIBER_IS_BROKEN_...	1	CPS_701_GPONA_01:rac...	U2000_PTP	Major		16:03:36 2025-11-14	16:03:36 2025-11-14
582960021	THE_FEEDER_FIBER_IS_BROKEN_...	1	CPS_601_GPONA_01:rac...	U2000_PTP	Major		16:03:35 2025-11-14	16:03:35 2025-11-14
582960022	THE_FEEDER_FIBER_IS_BROKEN_...	1	CPS_601_GPONA_01:rac...	U2000_PTP	Major		16:03:35 2025-11-14	16:03:35 2025-11-14
582960023	LINK_LOSS	1	NCR:PQE_004_GPONA_...	GPON_PORT	Critical		16:03:35 2025-11-14	16:03:35 2025-11-14
582960024	LINK_LOSS	1	MINDANAO:PGD_704_G...	GPON_PORT	Critical		16:03:35 2025-11-14	16:03:35 2025-11-14
582960015	LOOPBACK	1	MINDANAO:DVO_003_G...	GPON_LAN_PORT	Major		16:03:34 2025-11-14	16:03:34 2025-11-14
582959997	ONU_LOF	1	MINDANAO:MTI_001_G...	GPON_PORT	Critical		16:03:31 2025-11-14	16:03:31 2025-11-14
582959989	THE_RECTIFIER_MODULE_IS_ABN...	1	CPS_001_GPONA_01:rac...	HuaweiUniqueOb...	Major		16:03:30 2025-11-14	16:03:30 2025-11-14
582959990	THE_RECTIFIER_MODULE_IS_ABN...	1	CPS_001_GPONA_01:rac...	HuaweiUniqueOb...	Major		16:03:30 2025-11-14	16:03:30 2025-11-14
582959992	LOOPBACK	1	MINDANAO:CDO_012_G...	GPON_LAN_PORT	Major		16:03:30 2025-11-14	16:03:30 2025-11-14
582959993	LOOPBACK	1	MINDANAO:CDO_012_G...	GPON_LAN_PORT	Major		16:03:30 2025-11-14	16:03:30 2025-11-14

Alert Details Property Sheet

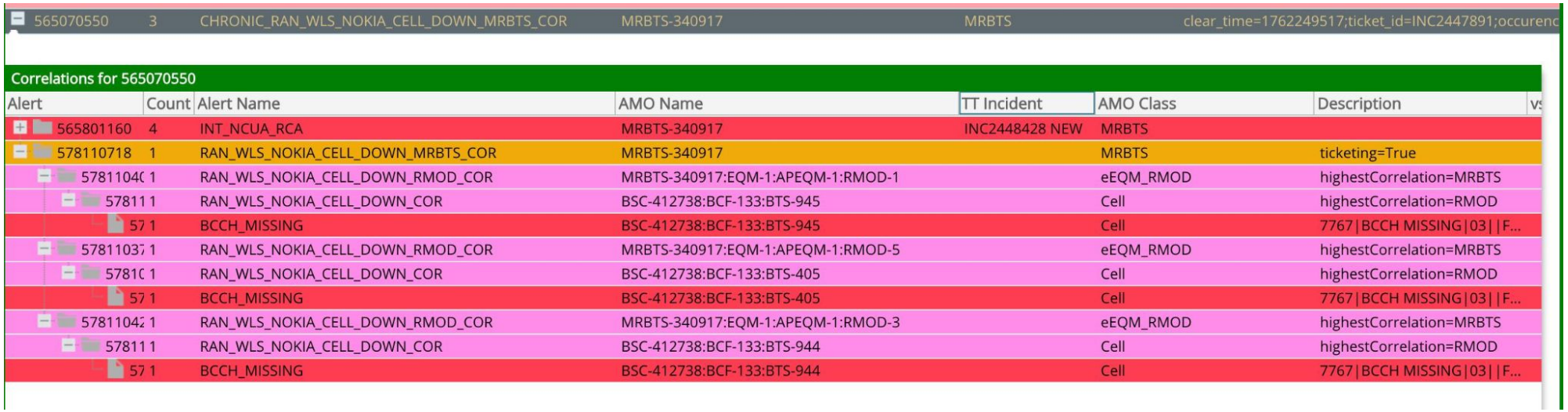
Name	Value
Alert Name	LINK_LOSS
Alert	582960071
Manager Class	FiberHome_TL1
Manager Name	FiberHome_TL1
AMO Class	GPON_PORT
AMO Name	MINDANAO:ILG_001_GPONA_01:GCOB[16]:ILG_001_L106_N02A_005
Severity	Critical
Count	1
TT Incident	
Created	16:03:42 2025-11-14
Updated	16:03:42 2025-11-14
Ack Time	
Ack Operator	
Description	ALARMID=2400;DIP=10.129.129.130;DTYPE=AN5116-06B;AdditionalInfo=SLOT...
Alert Type	serviceAlarm
Problem Type	unspecified
Detail Description	PROBABLE_CAUSE_DESC=The optical fibers are disconnected or broken dow...

Evidence: Alarm correlation & filtering

Correlation Policy: The system automatically correlates alarms by identifying the primary root alarm and its resulting downstream alarms using an internal multi-layer topology model.

Aggregation Policy: Alarms that clear within 5 minutes are excluded from ingestion into Mycom NetExpert for rules and correlation processing.

Intermittency Policy: Flapping alarms generate a single ticket after three confirmed flapping occurrences.



Fault Prediction

Question:

Does the wireless network fault management system support fault prediction in various fault scenarios?

Options:

Option A	Option B	Option C	Option D
The system can automatically identify potential risks and **predict the fault occurrence time** based on **intelligent models**. For example, the system can predict that the fronthaul optical module will be faulty within XX days.	The system can automatically identify potential risks based on **intelligent models (intelligent rules),** but cannot predict the fault occurrence time.	The system can identify potential risks based on manually defined rules. For example, the system can identify potential risks of fronthaul optical modules based on preset optical power thresholds.	Potential risks need to be manually identified based on expertise.

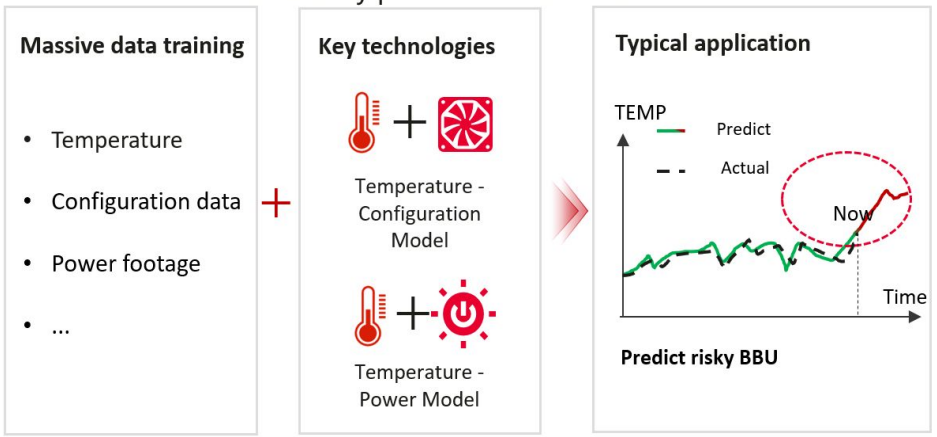
Answer:

Equipment	Communications	Environmental	Security
Transceiver problem	Fronthaul error	External power supply failure	Key Expired
A	A	A	A

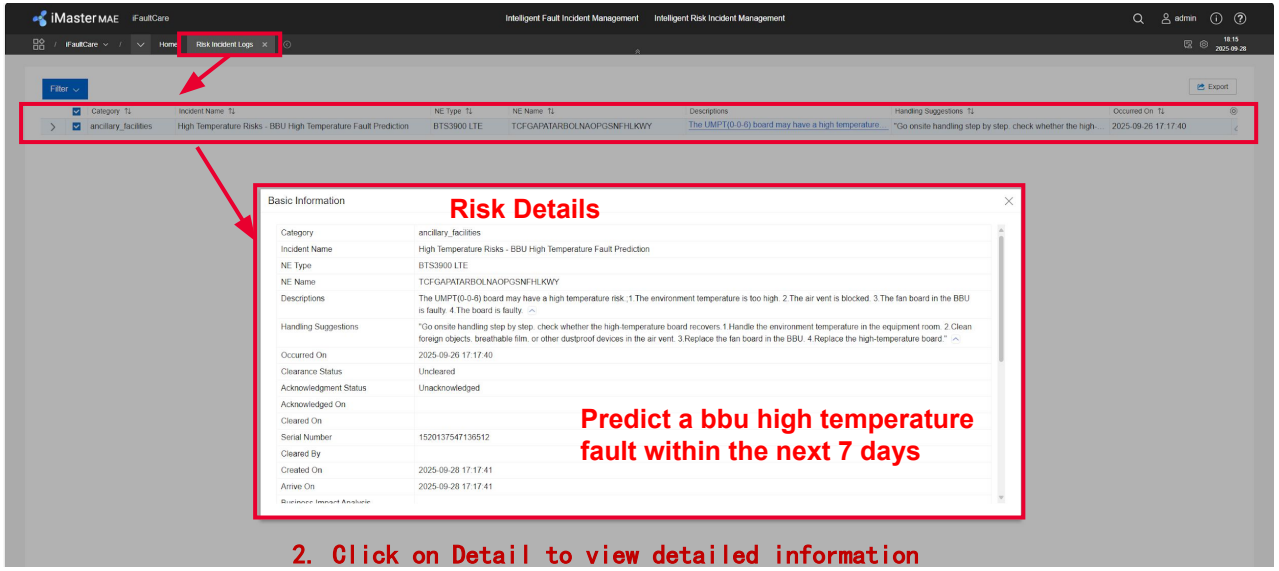
Evidence:

Transceiver problem

Accumulate fault mode experience and **collaborate model with single NE** to accurately predict root causes of faults.

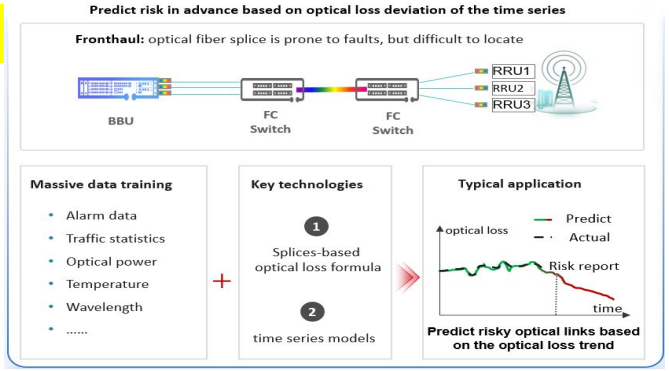


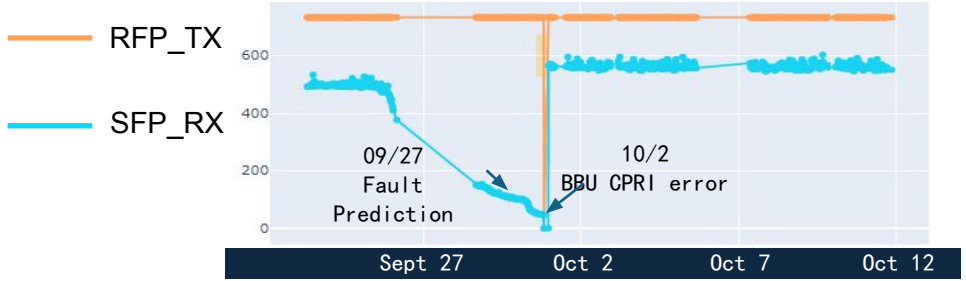
1. MAE can identify various high-risk information present in scripts.

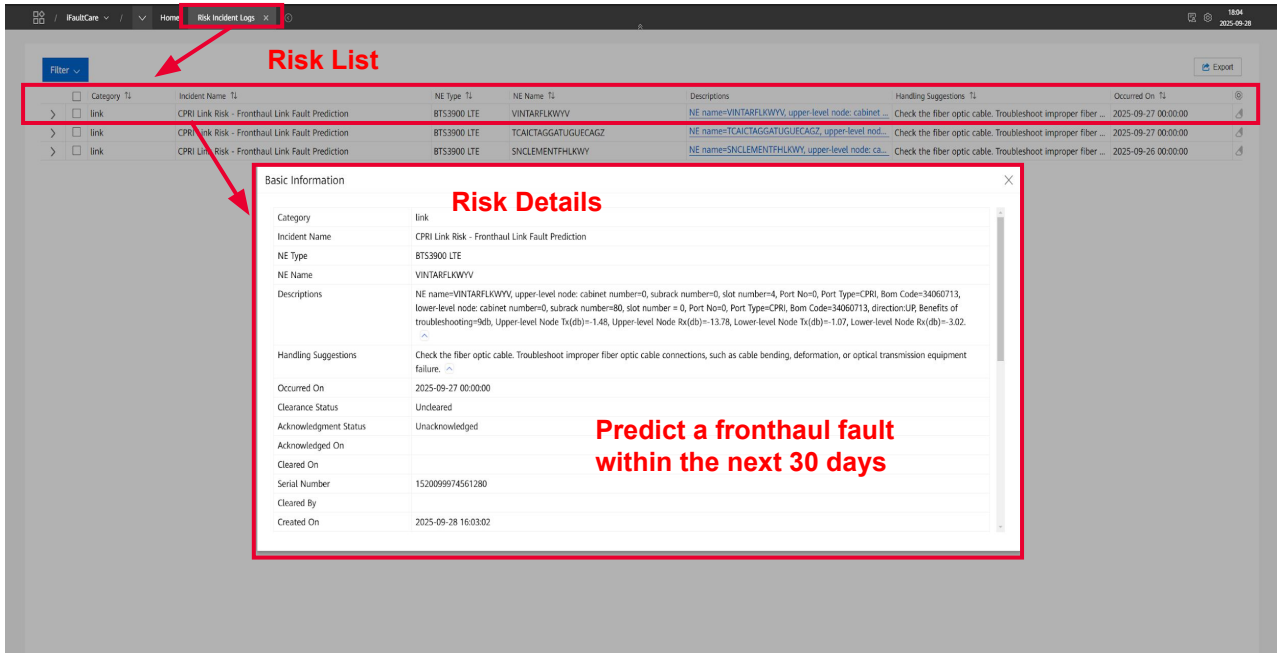


2. Click on Detail to view detailed information about high-risk alerts.

Fronthaul error (A)

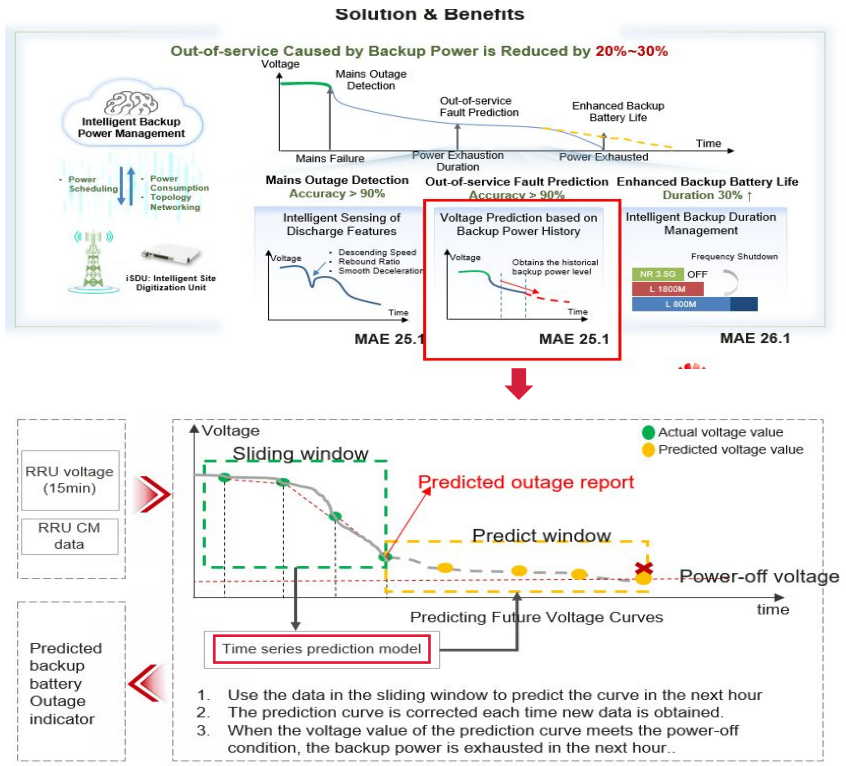




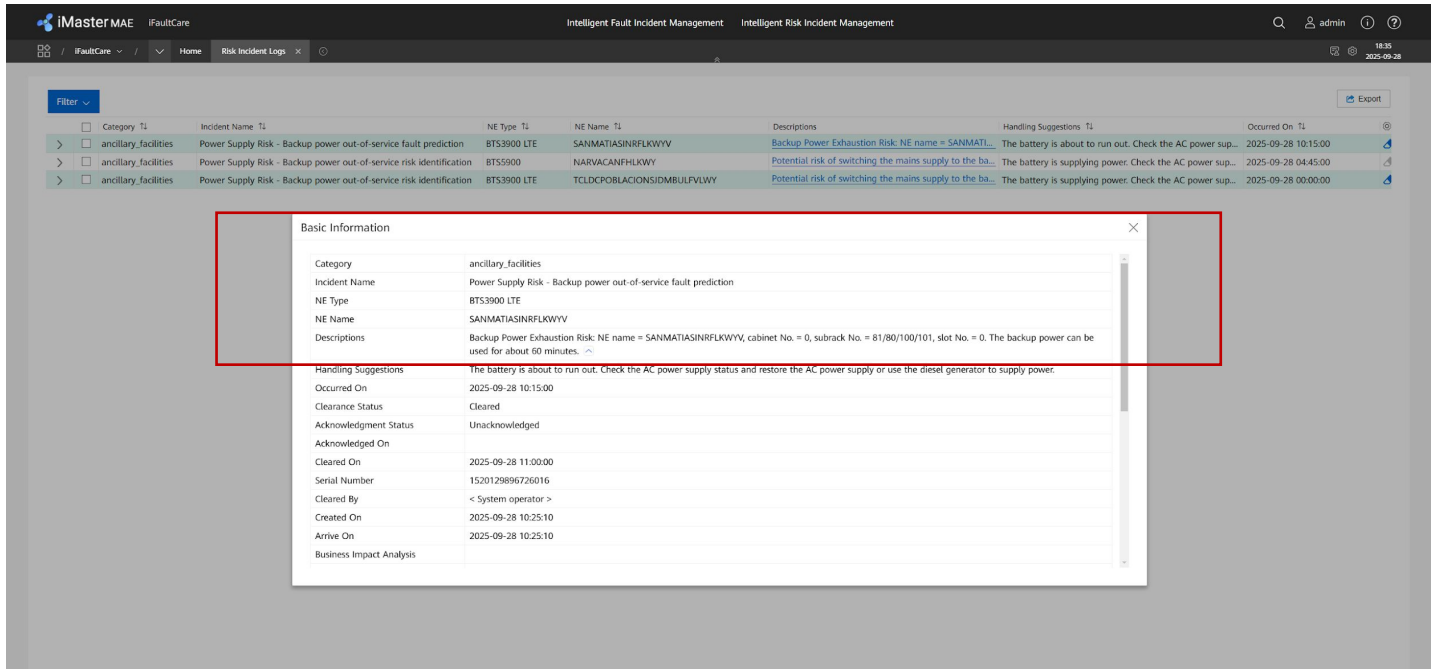


Evidence:

External power supply failure (A)



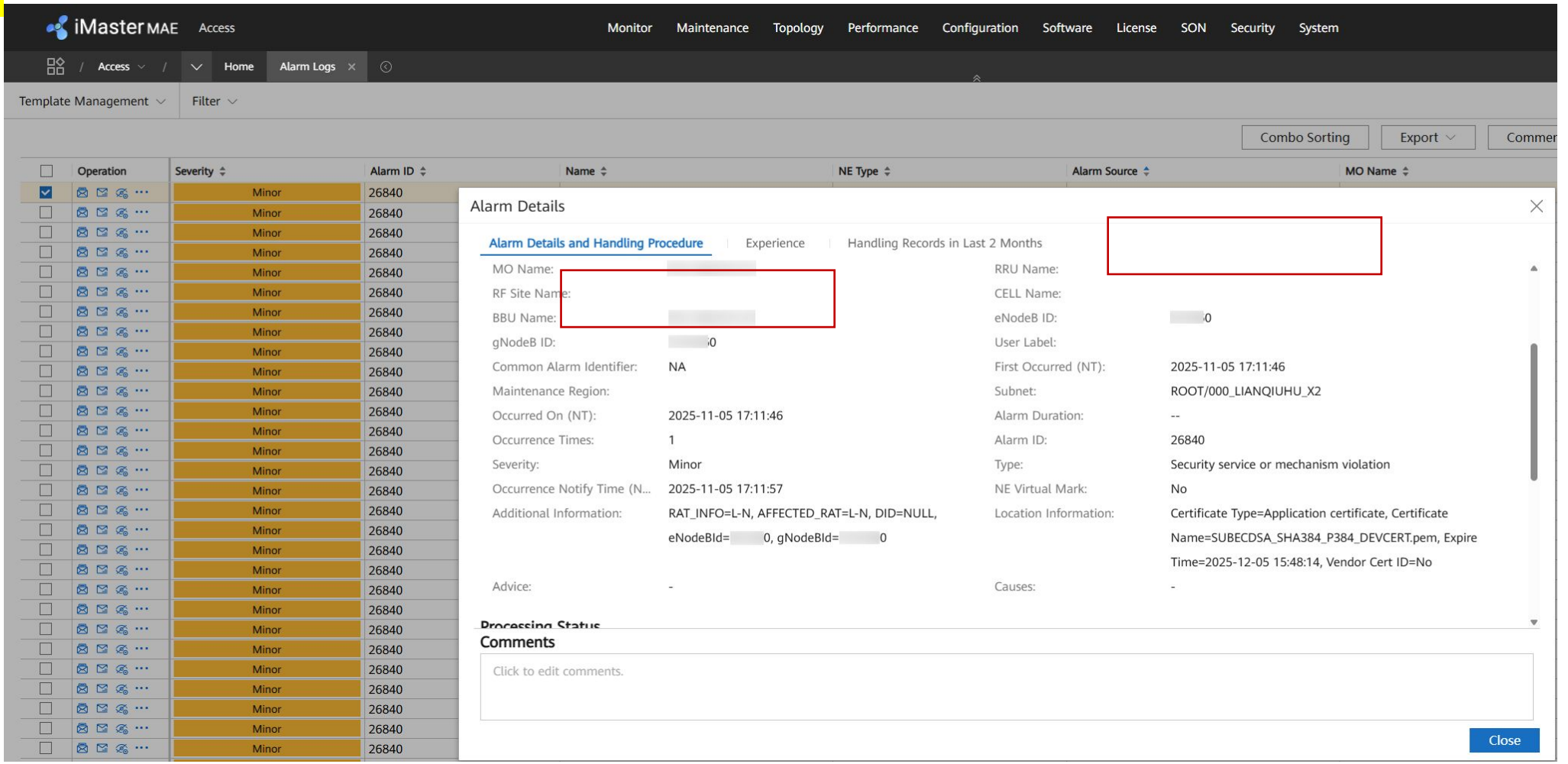
Predict the battery backup will run out within the next XX hours, causing the BTS or the cell to be out-of-service



The system can identify the health status of backup batteries and predict the time until power depletion.

Evidence:

Key Expired (A)



The system can automatically identify certificate expiration dates and provide notifications.

Fault identification & Impact analysis

Question: Does the wireless network fault management system support fault identification & fault impact analysis in various fault scenarios?

Options:

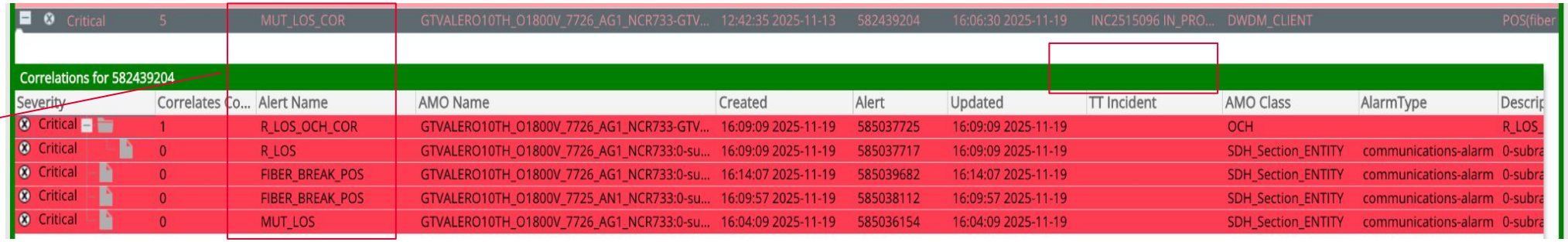
Option A	Option B	Option C	Option D
The system automatically identifies faults and subsequent impact based on **intelligent rules**.	The system can automatically identify faults and subsequent impact based on **manually defined rules**, for example, identifying intermittent faults based on a frequency experience threshold and aggregating periodic alarms based on a period threshold.	Faults and impact need to be manually identified based on expertise.	

Answer:

Equipment	Communications	Environmental	Security
Transceiver problem	Fronthaul error	External power supply failure	Key Expired
B	A	B	A

Evidence:

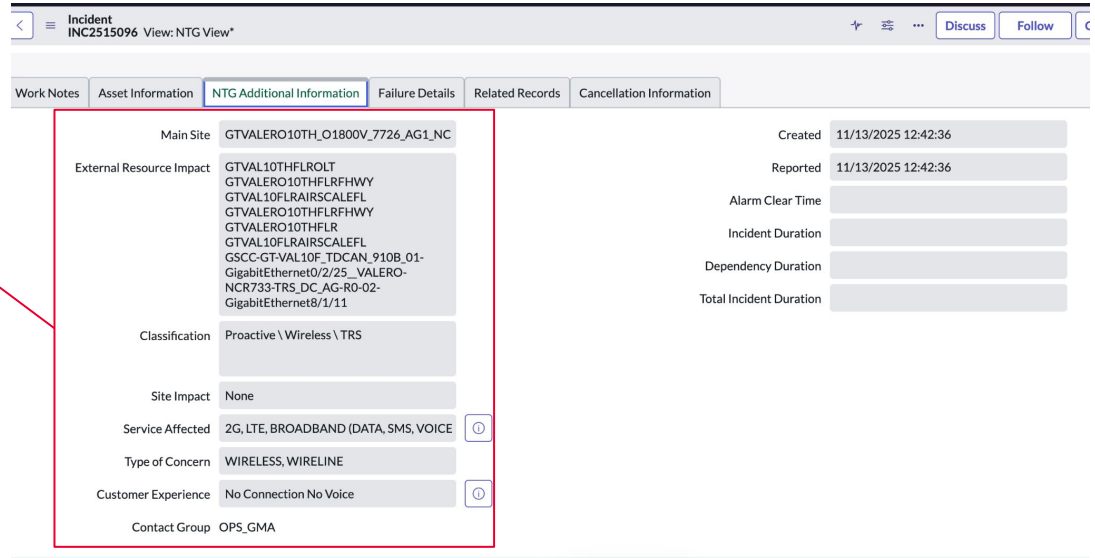
Alarm detection and correlation with ticket auto-creation



Correlations for 582439204

Severity	Correlates Co...	Alert Name	AMO Name	Created	Alert	Updated	TT Incident	AMO Class	AlarmType	Descrip
Critical	1	R_LOS_OCH_COR	GTVALERO10TH_O1800V_7726_AG1_NCR733-GTV...	16:09:09 2025-11-19	585037725	16:09:09 2025-11-19		OCH		R_LOS_
Critical	0	R_LOS	GTVALERO10TH_O1800V_7726_AG1_NCR733:0-su...	16:09:09 2025-11-19	585037717	16:09:09 2025-11-19		SDH_Section_ENTITY	communications-alarm	0-subra
Critical	0	FIBER_BREAK_POS	GTVALERO10TH_O1800V_7726_AG1_NCR733:0-su...	16:14:07 2025-11-19	585039682	16:14:07 2025-11-19		SDH_Section_ENTITY	communications-alarm	0-subra
Critical	0	FIBER_BREAK_POS	GTVALERO10TH_O1800V_7725_AN1_NCR733:0-su...	16:09:57 2025-11-19	585038112	16:09:57 2025-11-19		SDH_Section_ENTITY	communications-alarm	0-subra
Critical	0	MUT_LOS	GTVALERO10TH_O1800V_7726_AG1_NCR733:0-su...	16:04:09 2025-11-19	585036154	16:04:09 2025-11-19		SDH_Section_ENTITY	communications-alarm	0-subra

Incident ticket created indicating impacted resources and services via the impact analysis of Mycom Netexpert (SPM) and reflecting it automatically in ticket details



Incident INC2515096 View: NTG View*

Discuss | Follow

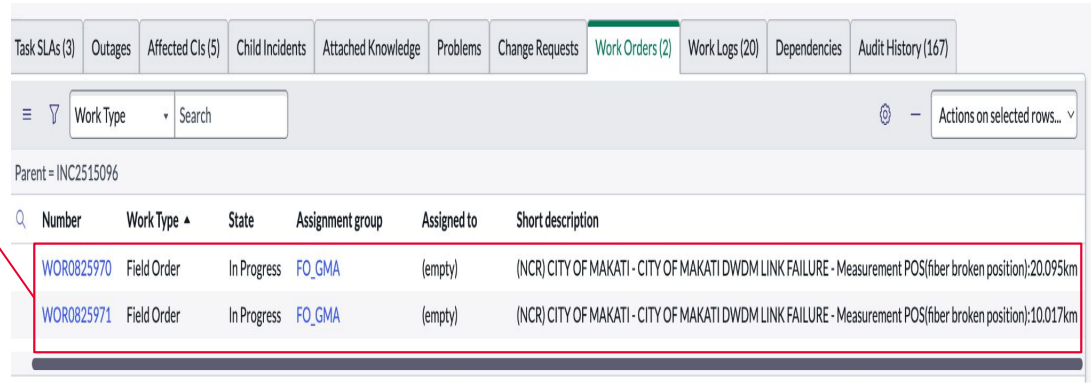
Work Notes | Asset Information | NTG Additional Information | Failure Details | Related Records | Cancellation Information

Main Site	GTVALERO10TH_O1800V_7726_AG1_NC
External Resource Impact	GTVAL10THFLROLT GTVALERO10THFLRFHWY GTVAL10FLRAIRSCALEFL GTVALERO10THFLRFHWY GTVALERO10THFLR GTVAL10FLRAIRSCALEFL GSCC-GT-VAL10F_TDCAN_910B_01-GigabitEthernet0/2/25__VALERO-NCR733-TRS_DC_AG-R0-02-GigabitEthernet8/1/11
Classification	Proactive \ Wireless \ TRS
Site Impact	None
Service Affected	2G, LTE, BROADBAND (DATA, SMS, VOICE
Type of Concern	WIRELESS, WIRELINE
Customer Experience	No Connection No Voice
Contact Group	OPS_GMA

Created	11/13/2025 12:42:36
Reported	11/13/2025 12:42:36
Alarm Clear Time	
Incident Duration	
Dependency Duration	
Total Incident Duration	

Incident ticket with equivalent work order indicating where is the exact fiber cut measurement from both ends

Ticket in workforce management (streamline) auto-dispatched to FO with provided fiber cut measurement

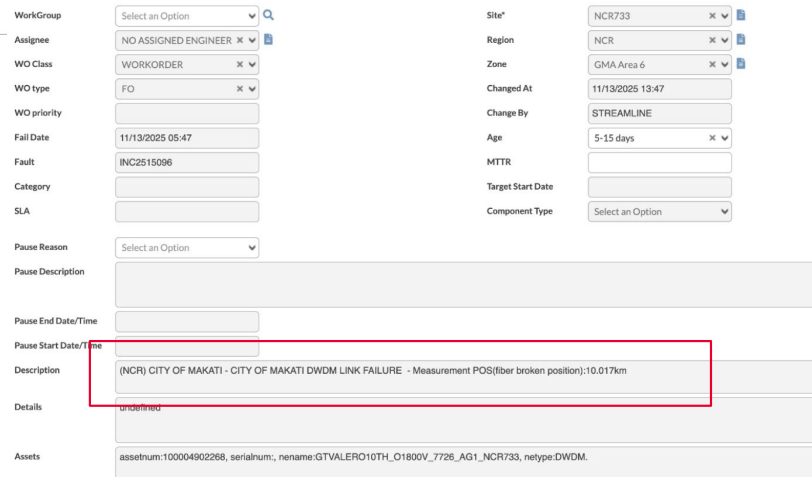


Task SLAs (3) | Outages | Affected CIs (5) | Child Incidents | Attached Knowledge | Problems | Change Requests | Work Orders (2) | Work Logs (20) | Dependencies | Audit History (167)

Work Type | Search | Actions on selected rows...

Parent = INC2515096

Number	Work Type	State	Assignment group	Assigned to	Short description
WOR0825970	Field Order	In Progress	FO_GMA	(empty)	(NCR) CITY OF MAKATI - CITY OF MAKATI DWDM LINK FAILURE - Measurement POS(fiber broken position):20.095km
WOR0825971	Field Order	In Progress	FO_GMA	(empty)	(NCR) CITY OF MAKATI - CITY OF MAKATI DWDM LINK FAILURE - Measurement POS(fiber broken position):10.017km



WorkGroup	Select an Option	Site*	NCR733
Assignee	NO ASSIGNED ENGINEER	Region	NCR
WO Class	WORKORDER	Zone	GMA Area 6
WO type	FO	Changed At	11/13/2025 13:47
WO priority		Change By	STREAMLINE
Fail Date	11/13/2025 05:47	Age	5-15 days
Fault	INC2515096	MTTR	
Category		Target Start Date	
SLA		Component Type	Select an Option
Pause Reason	Select an Option		
Pause Description			
Pause End Date/Time			
Pause Start Date/Time			
Description	(NCR) CITY OF MAKATI - CITY OF MAKATI DWDM LINK FAILURE - Measurement POS(fiber broken position):10.017km		
Details	undefined		
Assets	assetnum:100004902268, serialnum:, nename:GTVALERO10TH_O1800V_7726_AG1_NCR733, netype:DWDM.		

Demarcation & Locating

Question:

Does the wireless network fault management system support root cause diagnosis and fault locating in various fault scenarios?

Options:

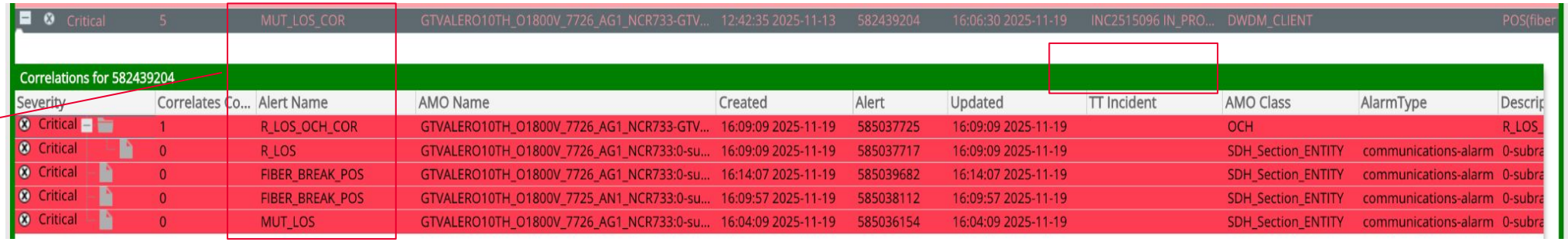
Option A	Option B	Option C	Option D
The system automatically demarcates and locates faults based on **intelligent models**	The system automatically demarcates the fault or locates **multiple causes** based on **intelligent diagnosis models**. Manual confirmation is required.	The system can demarcate and locate faults based on manually defined rules, such as experience-based fault trees and troubleshooting processes.	Fault diagnosis needs to be manually performed based on expertise.

Answer:

Equipment	Communications	Environmental	Security
Transceiver problem	Fronthaul error	External power supply failure	Key Expired
B	A	B	B

Evidence:

Alarm detection and correlation with ticket auto-creation

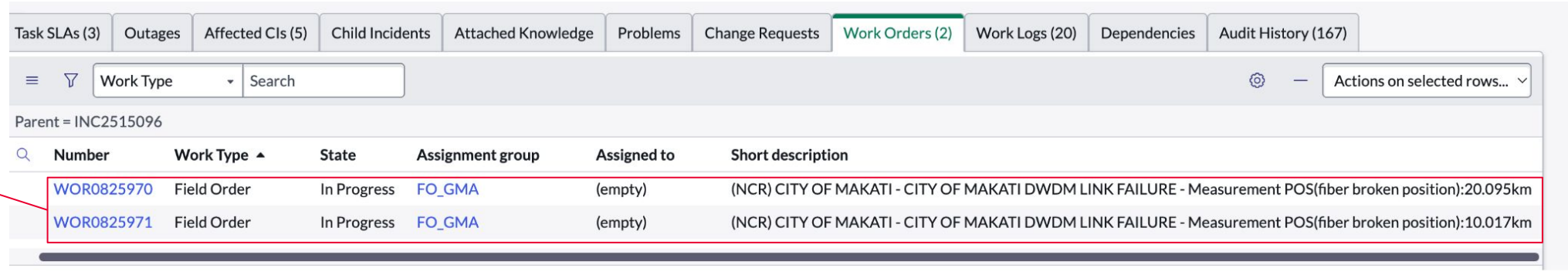


Critical	5	MUT_LOS_COR	GTVALERO10TH_O1800V_7726_AG1_NCR733-GTV...	12:42:35 2025-11-13	582439204	16:06:30 2025-11-19	INC2515096 IN_PRO...	DWDM_CLIENT	POS(fiber

Correlations for 582439204

Severity	Correlates Co...	Alert Name	AMO Name	Created	Alert	Updated	TT Incident	AMO Class	AlarmType	Descrip
Critical	1	R_LOS_OCH_COR	GTVALERO10TH_O1800V_7726_AG1_NCR733-GTV...	16:09:09 2025-11-19	585037725	16:09:09 2025-11-19		OCH		R_LOS_
Critical	0	R_LOS	GTVALERO10TH_O1800V_7726_AG1_NCR733:0-su...	16:09:09 2025-11-19	585037717	16:09:09 2025-11-19		SDH_Section_ENTITY	communications-alarm	0-subra
Critical	0	FIBER_BREAK_POS	GTVALERO10TH_O1800V_7726_AG1_NCR733:0-su...	16:14:07 2025-11-19	585039682	16:14:07 2025-11-19		SDH_Section_ENTITY	communications-alarm	0-subra
Critical	0	FIBER_BREAK_POS	GTVALERO10TH_O1800V_7725_AN1_NCR733:0-su...	16:09:57 2025-11-19	585038112	16:09:57 2025-11-19		SDH_Section_ENTITY	communications-alarm	0-subra
Critical	0	MUT_LOS	GTVALERO10TH_O1800V_7726_AG1_NCR733:0-su...	16:04:09 2025-11-19	585036154	16:04:09 2025-11-19		SDH_Section_ENTITY	communications-alarm	0-subra

Incident ticket with equivalent work order indicating where is the exact fiber cut measurement from both ends



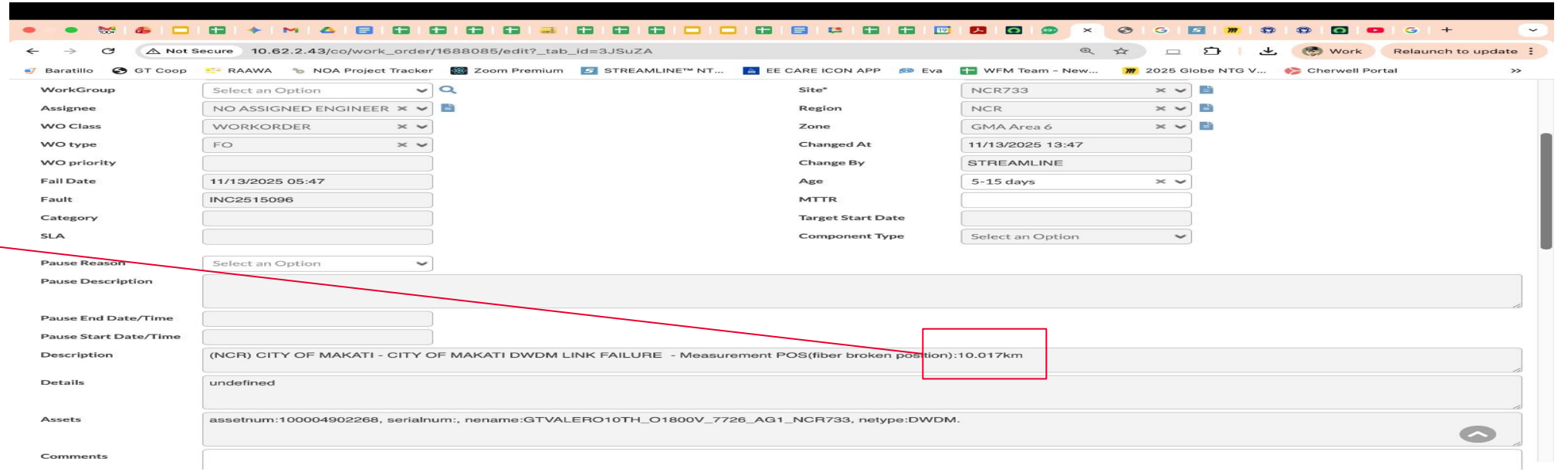
Task SLAs (3) | Outages | Affected CIs (5) | Child Incidents | Attached Knowledge | Problems | Change Requests | Work Orders (2) | Work Logs (20) | Dependencies | Audit History (167)

Work Type | Search | Actions on selected rows...

Parent = INC2515096

Number	Work Type	State	Assignment group	Assigned to	Short description
WOR0825970	Field Order	In Progress	FO_GMA	(empty)	(NCR) CITY OF MAKATI - CITY OF MAKATI DWDM LINK FAILURE - Measurement POS(fiber broken position):20.095km
WOR0825971	Field Order	In Progress	FO_GMA	(empty)	(NCR) CITY OF MAKATI - CITY OF MAKATI DWDM LINK FAILURE - Measurement POS(fiber broken position):10.017km

Ticket in workforce management (streamline) auto-dispatched to FO with provided fiber cut measurement



Not Secure 10.62.2.43/co/work_order/1688085/edit?_tab_id=3JSuZA

WorkGroup	Select an Option	Site*	NCR733
Assignee	NO ASSIGNED ENGINEER	Region	NCR
WO Class	WORKORDER	Zone	GMA Area 6
WO type	FO	Changed At	11/13/2025 13:47
WO priority		Change By	STREAMLINE
Fail Date	11/13/2025 05:47	Age	5-15 days
Fault	INC2515096	MTTR	
Category		Target Start Date	
SLA		Component Type	Select an Option
Pause Reason	Select an Option		
Pause Description			
Pause End Date/Time			
Pause Start Date/Time			
Description	(NCR) CITY OF MAKATI - CITY OF MAKATI DWDM LINK FAILURE - Measurement POS(fiber broken position):10.017km		
Details	undefined		
Assets	assetnum:100004902268, serialnum:, nename:GTVALERO10TH_O1800V_7726_AG1_NCR733, netype:DWDM.		
Comments			

Solution generation

Question: Does the wireless network fault management system support generation of fault recovery solutions in various scenarios?

Options:

Option A	Option B	Option C	Option D
The system automatically generates the **optimal** recovery or fault rectification solution through **intelligent analysis**, such as the neighboring cell RF compensation recovery solution.	The system automatically generates **multiple possible** recovery or rectification solutions, such as the remote recovery solution, neighboring cell RF compensation service recovery solution. Manual confirmation is required.	The recovery solution needs to be manually identified.	

Answer:

Equipment	Communications	Environmental	Security
Transceiver problem	Fronthaul error	External power supply failure	Key Expired
A	B	A	A

Evaluation and decision-making (Same evidence with Solution generation)

Question: Does the wireless network fault management system support evaluation and decision-making in various scenarios?

Options:

Option A	Option B	Option C	Option D
The system automatically evaluates and determines the **optimal** recovery or fault rectification solution through **intelligent analysis**, such as the neighboring cell RF compensation recovery solution.	The system automatically evaluates **multiple possible** recovery or rectification solutions, such as the remote recovery solution, neighboring cell RF compensation service recovery solution Manual confirmation is required	The recovery solution needs to be manually evaluated and decided.	

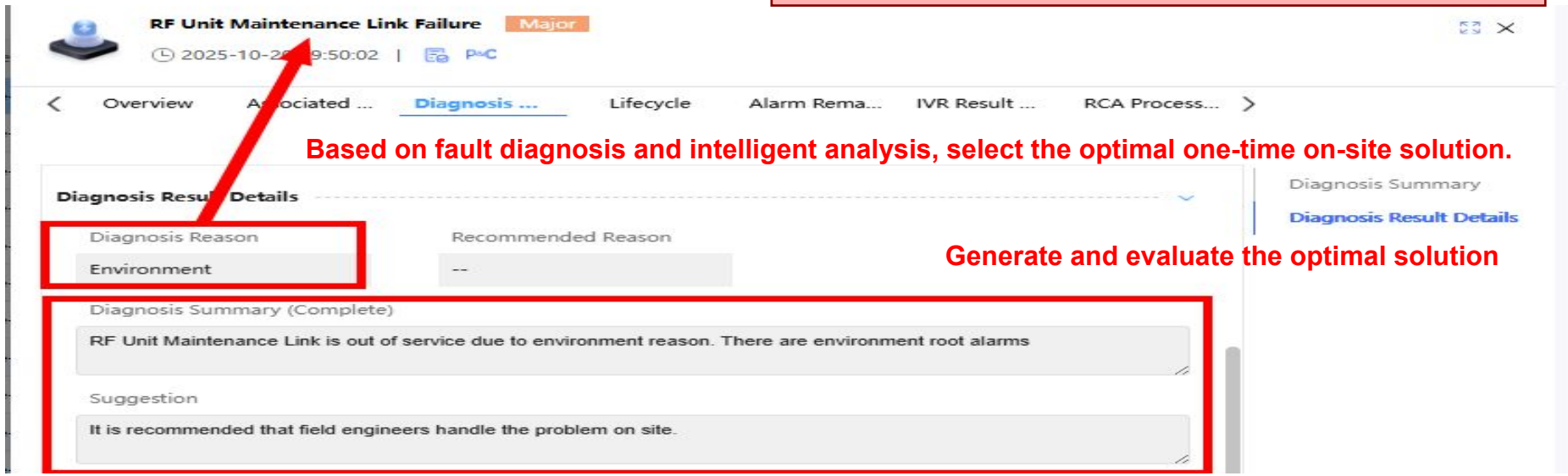
Answer:

Equipment	Communications	Environmental	Security
Transceiver problem	Fronthaul error	External power supply failure	Key Expired
A	B	A	A

Evidence：

Fronthaul error (B)

solution suggestions are automatically provided in all scenarios, as shown in the evidence for demarcation & location, while manual confirmation is required.



Evidence：

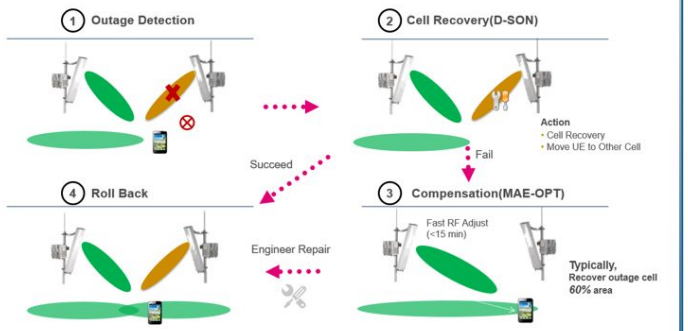
Transceiver problem(A)

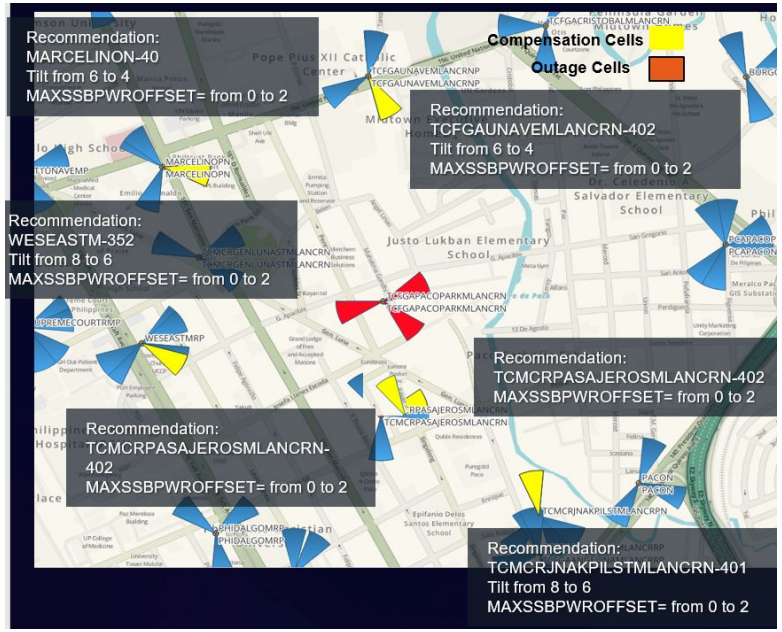
External power supply failure (A)

Key Expired (A)

Example : Cell Outage Detection and Compensation (CODC) – based on NE disconnect and out of service

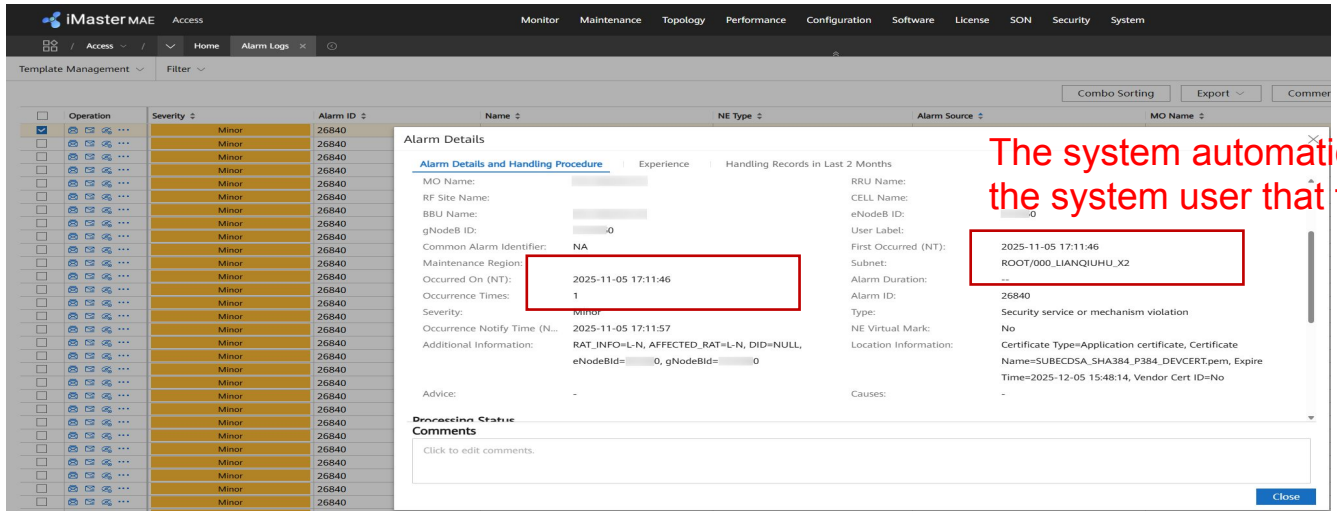
- Identifying Compensation Neighboring Cells Based on Outage Cell Coverage Environment Detection
- Compensation cell and traffic center detection to get the best compensation cell
- Adjustment parameters: Pattern(scenario + azimuth + downtilt), SSB power offset)





Type	Traffic Before Outage	Traffic During Compensation Period	Compensation Gain
NR DL Traffic Volume GB			
CODC Compensation Cells	179.0832	337.5587	46.95%
Outage Cell	29.8817	0.5862	
NR UL Traffic Volume (GB)			
CODC Compensation Cells	11.6712	19.1591	39.08%
Outage Cell	1.3954	0.0507	
NSA DC User			
CODC Compensation Cells	787.866	1688.7516	53.35%
Outage Cell	145.5275	10.0904	

Automatically generate & evaluate the optimal solution



The system automatically diagnose the fault and notify the system user that the certificate will expired.

Solution implementation

Question:

Does the wireless network fault management system support automatic execution of troubleshooting solutions in various scenarios?

Options:

Option A	Option B	Option C	Option D
The system can **automatically execute** instructions.	Humans use the system to execute instructions.	The recovery solution needs to be manually implemented	

Answer:

Equipment	Communications	Environmental	Security
Transceiver problem	Fronthaul error	External power supply failure	Key Expired
A	A	A	A

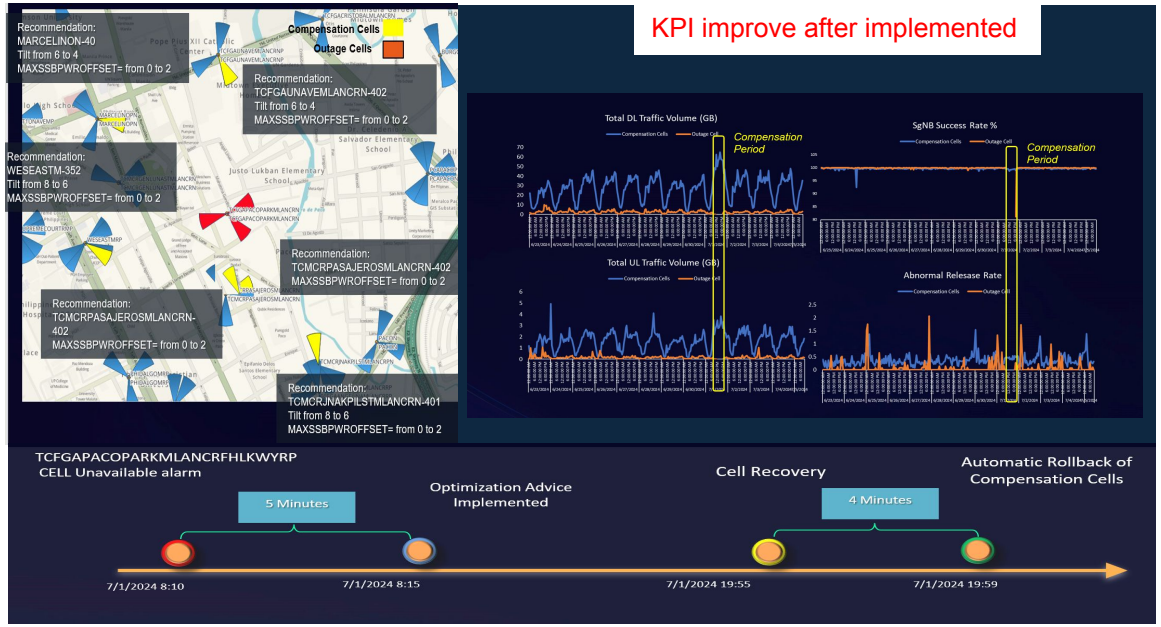
Evidence:

External power supply failure (A)

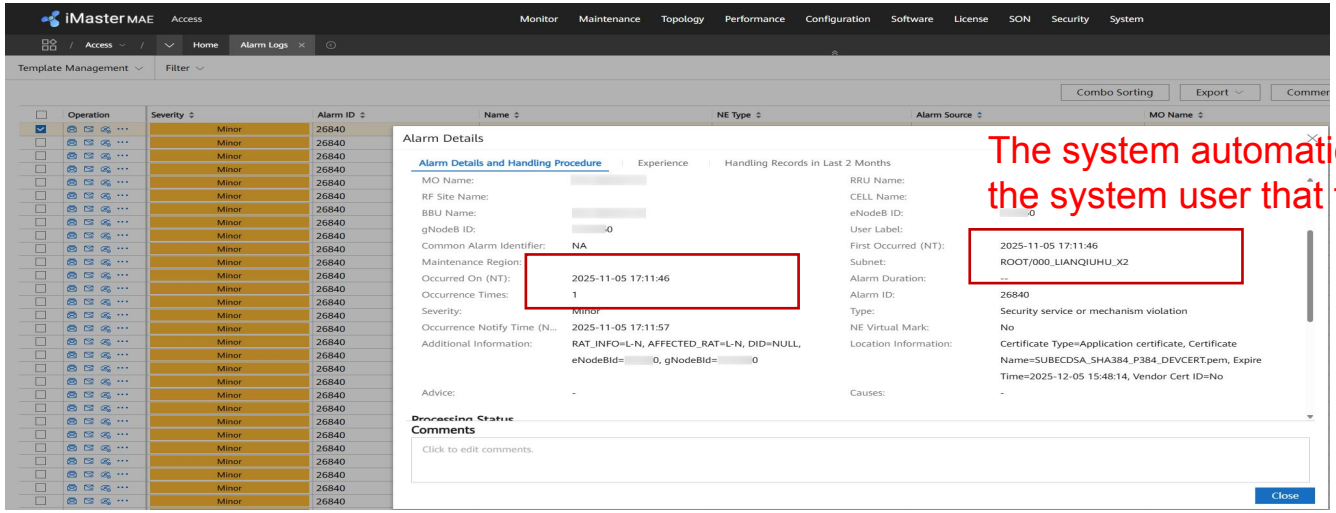
Transceiver problem(A)

Fronthaul error (A)

Key Expired (A)



CODC - Solution auto evaluated to Minimize traffic loss – Site/Cell out of service and cell fault



The system automatically diagnose the fault and notify the system user that the certificate will expired.

Thank you