

ANL Assessment and evidences of China Mobile on GB1059A

April 2025



Autonomous network level evaluation - RAN Fault Management(1/2) 一下 中国移动 China Mobile

High- Value Scenario	Cognitive Activity (IAADE)	Service Capabilit y	Weig ht	Question	Option A	Option B	Option C	Option D
RAN - Fault Managem	Intent	Intent- driven	10%	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)	The system automatically generates fault management task targets and policies based on intent. Fault management targets and	policies need to be manually defined.	Fault management task targets and policies are manually defined based on expertise. Manually evaluate the effect after the intention is implemented.	
ent		Data collection & Alarm filtering	10%	scenarios?	data (alarm configuration and		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/redunda nt alarms.
		Fault Prediction	15%	management system support fault prediction in various fault scenarios? Fault scenarios include NE disconnection or out-of-service, cell faults, and fronthaul	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.

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High- Value Scenario	Cognitive Activity (IAADE)	Service Capabilit y	Weig ht	Question	Option A	Option B	Option C	Option D
		Fault identificati on & Impact analysis	20%	various fault scenarios?	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.	
	Analysis	Demarcati on & Locating	20%		demarcates and locates faults based	The system automatically demarcates the fault or locates multiple causes based on intelligent diagnosis models. Manual confirmation is required.	defined rules, such as experience- based fault trees and troubleshooting processes.	Fault diagnosis needs to be manually performed based on expertise.
RAN - Fault Managem ent		Solution generation	10%	management system support generation of fault recovery solutions in various scenarios? Fault scenarios include NE disconnection or out of convice, coll faults, and fronthaul	the optimal recovery or fault rectification solution through intelligent analysis, such as the neighboring cell RF compensation	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.	
	Decision	Evaluation and decision- making	10%	management system support evaluation and decision-making in various scenarios? Fault scenarios include NE disconnection or out-of-service, cell faults, and frontbaul	neignboring cell RF compensation	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.	
		Solution implement ation	5%		The system can automatically execute instructions.	Humans use the system to execute instructions.	The recovery solution needs to be manually implemented	



In the ratings of eight autonomous capability for RAN fault management, China Mobile obtained 7"A"s &1"B", among them, the "intent-driven" capability is currently assessed as "B".

Service Capability	Weight	Answer	Score
Intent-driven	10%	В	3
Data Collection and Alarm Filtering	10%	А	3. 8
Fault prediction	15%	А	4
Fault Identification and Impact Analysis	20%	А	3.8
Demarcation and locating	20%	А	4
Solution generation	10%	А	4
Evaluation and Decision-Making	10%	А	4
Solution Implementation	5%	А	3. 8
			3.83

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). Fault scenarios include NE disconnection or out-of-service, cell faults, and fronthaul network faults.

	Option A	✓ Option B	Option C	Option D
Options	on intent. Fault management targets and policies need to be manually confirmed.	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.	are manually defined based on expertise. Manually evaluate the effect after the	

Evidence In the scenario where a cell is out of service, for example, you can identify intentions based on fault management (maintain the stable operation of network devices), determine management objectives (handle alarms that frequently occur in a high-priority manner), and management policies (if the number of times that an alarm occurs on the same NE within xx consecutive days exceeds xx, an additional "event" is generated to alert maintenance personnel).

Pre-defined planning (if there are more than five pre-defined plans within seven days, an early warning will be given...), and task objectives will be automatically generated. Automatically generate a task in accordance with the target: Monitor the frequent alarm events that exceed the pre-alarm threshold.



You can select an alarm code to support NE link disconnection or out-of-service, cell faults, and fronthaul network faults.

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Automatic generation of management policies: Each event has detailed alarm classification analysis and implementation suggestions (management policy).

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Question

Evidence

Does the wireless network fault management system support automatic data collection & alarm filtering in various fault scenarios? Fault scenarios include NE disconnection or out-of-service, cell faults, and fronthaul network faults.

	✓ Option A	Option B	Option C	Option D
Options	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.

- Data collection and association: Automatic collection and association of alarms, configurations, and performance data in different networks and scenarios are implemented based on the fault center collector. The automatic collection ratio is 100%.
- Repeated alarm filtering: Based on the alarm filtering configuration in the fault center, invalid and redundant alarms are automatically filtered in accordance with rules. Automatic filtering proportion 100%.

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Fault prediction



Question

Does the wireless network fault management system support fault prediction in various fault scenarios? Fault scenarios include NE disconnection or out-of-service, cell faults, and fronthaul network faults.

	Option A	Option B	Option C	Option D
Options	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.	potential risks based on intelligent models (intelligent rules), but cannot predict the	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.

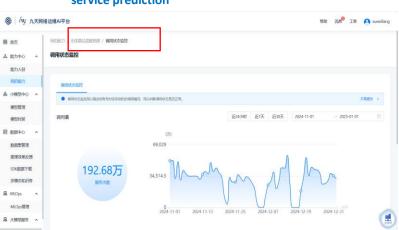
Evidence The prediction model of the wireless O&M workbench is used to evaluate the out-of-service probability of base stations in the future. Based on the alarms, trouble tickets, and dynamic and environmental supporting data of base stations, and the correlation between historical fault time, fault frequency, trouble tickets, and dynamic and environmental supporting data, the comprehensive analysis is performed to output the out-of-service probability of base stations in a specific future period. The out-of-service prediction accuracy is greater than 95%.

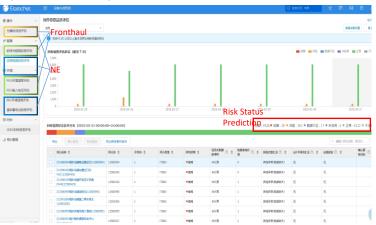
Wireless O&M Workbench

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Atomic capability: Large-model-based cell out-ofservice prediction

Atomic capability: Small-model-based device failure prediction (NE and fronthaul)







Question

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

Fault scenarios include NE disconnection or out-of-service, cell faults, and fronthaul network faults.

	Option A	Option B	Option C	Option D
Options	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.	
Evidence	station fault classification, and output th identifies faults through intelligent rules, Fault impact analysis: In accordance with the system outputs the qualitative result	e base station fault identification result (ba associated resource centers, and performa different types of faults and the impact de s such as all services blocked, some service	e correlation between alarms and base station fa se station out-of-service, cell out-of-service, or ance centers in multiple dimensions. The identifi egree, the system automatically outputs the imp es affected, and no impact, which are displayed in putput more accurate analysis results such as the	performance fault). The fault center cation accuracy is 100%. act of this alarm. For a single-site fault, n the fault work order. The impact

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告誓義次发生的词

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2025-03-11 12:27:08

2025-03-11 12:25:59

2025-03-11 12:25-58

2025-03-11 12:25:55

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2025-03-11 11:47:00

2025-03-11 11:45:39

2025-03-11 11:45:05

2025-03-11 11:43:29

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The fault center supports the identification of fault types in all fields.

users.

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The fault center corresponds to the alarm level in accordance with the alarm situation.

二級合盤

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苦酒英品 (8-1-01)

普通基础 (8小时)

VIPARE (3/NI)

普通基治 (8小时)

芸術製品(8小时)

普通差站(8/tef) REGAMP

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用元许报中断

STATISTICS AND REPORT

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23-1-017-20250311-02689 (11) 日. 合州市 206380438046888068

71-1-017-20250311-02692 美国社 H072785造工修理 BTS

末消酸 溢州市 H772010造工邮告

23-1-017-20250311-02092 素活致 提州市 H977527乐酒香江爱谷FD01800 二级击警

71.1.017.3050111.03641 171.1 0185 0455 04660000000000 -0058

Z3-1-017-20250311-02641 未加速 宁波市 H944604宁波会就道达小级FD01800 二级击撃

Z3-1-017-20250311-02324 [07] R. 宁波市 N840699-宁波市江北区地在挑剔山市点C. 二級告輩

21-1-017-20250311-02324 101 已. 宁波市 N748420宁波江北庄振歌山-ENODEB 二級告盤

21-1-017-20250311-02324 (V1) E- 9205 NB42840920213LEERWELLIYEERKEL

23-1-017-202503111-02324 日本総 学改市 N6406199-学改市江北区地注册和山市点C.. 二級告輩

ZJ-1-017-20250311-01932 11/1 北. 金华市 N791238歳江5英-ENODEB 二級告替

Z3-1-017-20250311-02641 学校市 N844334学校未能通达小区-ENCDEB 二级白垩

1/1 法 字波市 N844334字设余线道达小区-ENODEB 二级击警

未満該 中波市 N844660 中波会認識士大術会第任・NLW 二級告報

またれ N844772字波余能承述小区(VEI変)がDE. 二級告報

Single-site fault impact analysis: Qualitative analysis
(all services are blocked, some services are partially
blocked, and there is no impact).

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Analyze the impact of out-of-service faults in batches: Analyze the impact of the fault scope and the number of users.

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Demarcating and locating



Question

Evidence

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

Fault scenarios include NE disconnection or out-of-service, cell faults, and fronthaul network faults.

	Option A	Option B	Option C	Option D
Options	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.Fault diagnosis needs to be performed manually in accordance with professional knowledge.

- Cross-domain alarm association delimitation: Based on the large fault intelligent analysis model, this function analyzes the current alarms of base stations, implements the delimitation of wireless, dynamic, and transmission fields, locates the root causes of alarms in scenarios such as NE link disconnection, out-of-service, cell faults, and fronthaul network faults, and achieves the accuracy of >95% delimitation and location.
- Single-domain alarm root cause location: Through the alarm root cause diagnosis function provided by the device manufacturer, based on the manufacturer's alarm implementation mechanism and decision tree, accurate root cause location inside the device is implemented, and the location accuracy is >95%.

Fault center: Single-site fault delimitation and location

Fault center: Fault Demarcating and locating in batches

Precise locating of internal root causes

() BNR9:	【本地无线】17:12月宁市出现9个4G	基站追握,覆盖范围:Z834623两行	P盐仓星星港湾南LY信源地FDD部分	1981a	0 ANNIR	Buildod Mitza	UTENNAMOS 1 0 202	€ [2366] 5-04-01 1453204 ● 次 倍 預	‼ ×	告告报回 逻辑能动D 网元名称	① 服水市 ③	开发区5G基础跟股的11股(20个) 🔝 1025-04-01 12:25:59 🖷 🕼 🖏	200	B× :	(Z1158 ×	1			¢
<u><u><u>A</u></u> <u>#868</u>: <u>#</u>83</u>] 15_c6a5b15x8664b1.	814270 H814270第止头测	(1522.0 7553		>	10_326e34df1889f无线 042643 学被电学》	· 《 概要信息 关联		間醫強注己. NR发送结 >		周元	211580596相步舆盟年年们的CRAN(11580598)	告告	高名称 整动处于初始化状态 巴希斯信息	
BHENK: BHE	以 按導关型: [現代]46社最回题	场服装型 : 高兴无线-4G版	站建建建 事件历时: (天1时	16:00	19_ac52639c4907	814270 H814270兼山头道	NUMBER		10	6_5d381f29a3d 无线 042690 宁波市宁派	制处理概要			Ser Higg	位置	Equipment=1	<u>%</u> :	出时间 2025-01-21 15:36:04	
任务看板 关联告警	人员信息 一线运维反馈	GIS地图 事件工单相关] 17.76bd18929ff1	758508 旧共作的地区输出			新於用教授 初於用於有利率項	11653251 21165325	-E.S. 408-38-12818	验出建筑1000		發出現結果評慎 丹	医建议 法原则告告	NAX2 HERORE			
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故障友生	预处理	故障定界	故障处置	設局改算	2 16 956248587011. 8171	812543 H012542#1022	2025-04-01 1453/04	210220004		4_757c5388e6dk 动力传输 757566 磁讯市	277.859.854				产生方式		PLMN	+ g	
🗶 526828 📀	📕 ARIGERSTE 🛛 😏	Addemast 📀	📓 获取传输的物方室	KISBSER 🕗		072759 H0727595清秋月	服化理状态	预测数型		19_c72a52bdcadf \$251 11653251 21165325		预计理关型			#192550	物理网元		AB LTEAR	
結果:吉豐裕證: 1651古豐國治市 第5759个40要總要出現股白豐	結果.週刊成款,正在此行致处理 来源:日前平台	结果调用成功,正在执行图能设 新!	当年事件未开自	結果:日華以龍: 9 指令下发共戦: 0		614270 H814270第止头部	8 Fit o	自动的处理		11_e8d9c7c3a83d 动力其它 11653251 Z1165325	the second second	自动预计规			附加参数	boardSeriaNumber: 751299301187 boardType: VSWd1	定位	信息 - 们说-1,积极-1,帮板-1	
告警板部: 田報告警 具市名称: 海宁市	2025-03-03 17:23:29 11 有限人 形態	-来游:白矾平台	67	11230年2月19日 1月12日 - 111日 - 111日 111日 - 111日 1111 - 111日 1111 - 1111 1111 - 11111 1111 - 11111 11111 - 11111 11111 - 11111 1111 - 11111 1111 - 111	0_e09307a3e66b	11583875 H1158387588999	白垩形日			18_bd6dd2a2a%4 动力 11653251 服水市开发	DOM: N				站坦名称(周向)	211580598相多黑暗年华机会CRAN	告望对象	E型 ITEBU	
告罄时间: 2025-03-03 17:13:55 麦纳英记歌歌: 9	A REFERENCE O	2025-03-03 17:23:29 (16編人 方法		异常占比: 0.0%	10 83beb6da955.	812943 H812943mL/03	助			約_66109121483 动力 11653251 副休市	动力				告管对象ID	11580598	告誓刘章:	客称 Z11580598根乡集盛年华们进CR4N	
※1日日1000年1月 税元書年:2833382時子型型推測 江月回860時FDD1800.	Manchaman O	📕 zokizeite 🛛 📀	治療事件未开启	2025-00-00 18:25:37 ②机器人 专业		11523275 H115232754549	预归期表			13_1ecebd608373 无规功成 416731 机州市莱	R 税公用相要				基社业务ID	LTE eNBId:212164,NR gNBId:11590598	单板	N型 VSWd1	
2834823海宁盐仓星里港湾电Y信	最终市基起资服结况【4G资新…	结果-20环期因比例: 88.09% 告始得天比例: 11.11%	100	A Michael 🕢) 16 SoldstictBasid_ ##		基础建設管辖安位集团为同	医病功出腺	1	16 212(630619714 武功无线 740018 宁波市部	共退服20个基础、主要				告誓对象	Equipment		DN SubNetwork=1,ManagedElement=11580598,Equipment=1	
游波F00, 273444每行盐合是更易消息。		无线数因比例: 0.0%	14/9	结束:总算出数.9.			无线音输1.TE基站意服派生 动环音输;有模拟量射频单计			4 fa66c616a53d. 814542 把用于H	动力原因导致进展站点 传输原因导致消振站点				S-NSSAI		虚拟资源		
2837784時宁聖聖港湾[月窟88년	2025-03-03 17:23:29 0月混人专业	不够确论的: 0.0% 作品的情况无限性点:		担令下发失败1, 和别意公批4.	0_Steb37611bbc	11523875 H11583879建四	409回家(日常9重55家年) 停电时间 2025-04-01 14-53				无线票因导致道服这点	个、占比0.00%			翔关朱		with the second s	明南 2023-01-21 15:49:42	1
D, 2831176局宁盐合重型港湾由い信	Alexandra 🕓	和公组织南[196.05];4		AWF 制印度基达数:0.] 10_21dc41117392	758508 H75850848#(MRF	传输告勤(元)。 首均传输信息(元)。			N0_3d85代ke9e58动环 595576 金华市街5	其他原因导致逻辑站点 (一)动力原因导致遵					The root cause		1) 2010 - 銀分時: 役錄301章	
源於6F. 2737665時711公務時1712公務時1712年8月.	结果【嘉元本地小事件-无线-4G批	动脉动脉网元要素点。 第7至6至整束清生机向r输入电压		算用占比100%。 结果相称15mc周正常: 1833382;] 10_atb77ec42423	11706669 E11706669-3845	国初時船(20)(元) 关計時線电路(元)			11_5bc253e434ab. 其它 099813 金华市	(二) 传输原因导致退	1881年0个				conclusion of the		故障二级分演: 软件研想	1 1
2337436局宁盐合星型用清量FDD1	嚴臣服 关注] 17:12, 出现除宁市8 个4G基站进展故障;	算管、安藤英宅、信用输出电压过 低音管、交流输入波频音管、输入		934265, 937406, 737605, 9377 84, 737124], 'ping調算當: [], '協令) 10 Stattast272	072759 H0727995, ANS	关联告数发生时间 2025-04			17_d043b99d5d5 其它 193125 全学市	(三) 无线第因导致息 (四) 其他第因导致退				诊断状态	成功	· 第四分析	放程信息: 書業 基站检查Equipment=1	1 1
600, 2737124指于盐合星型用清电LYE	【业务影响情况】2834823海宁监 会里里脱湾岛LY区影协FDD航后区	elast: versynastas any		84, 73/124), progagatal: [J. 10-5 下发失败: [734444, 831178, 934] 10 b4e06e4293x0	072759 H0727595; mgg	站自名称杭州能输文建徽人	(5010) k		il_a141c14c2206 其它 192762 全单市	该事件为非工程引起。					locating is a softwa	are	根因(mi)2: 軟件類位	
BBSF	編4G通信业务; 【京都订单】2853582指中年期间	- 朱熹: 自耕平台	1	623]) 2025-03-03 18:25:51 2:65.87 / 559	0_355cded03a7H_	11709710 E11709710-Web	ROKORA B	合型的描述型 NA		19_4691603c5743 无线 095833 金华市委3	是否根据网元	告警传播笑型	,			failure within the o		*/***********************************	

Solution generation



Question

Evidence

- Does the wireless network fault management system support generation of fault recovery solutions in various scenarios?
- Fault scenarios include NE disconnection or out-of-service, cell faults, and fronthaul network faults.

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.	solution, such as the remote recovery	The recovery solution needs to be manually identified.	

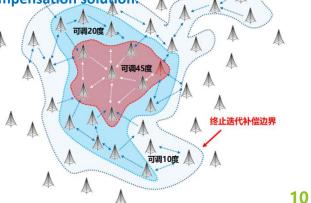
- The root cause diagnosis function of the device manufacturer is used to output an alarm solution. Currently, 90% of 5G dispatch alarms are covered, and the solution is valid >90%. Solutions include manual execution (for example, board replacement) and automatic execution (for example, base station reset and RF compensation recovery of neighbor cells).
- Neighbor cell compensation solution: Generates coverage compensation solutions dynamically in real time based on out-of-service alarms, analysis of faulty NEs, power configuration, engineering parameter configuration, and performance indicators of neighbor cells. At the same time, for the problems that may occur during the automatic compensation process of out-of-service sites, the "iterative adjustment convergence" algorithm is innovated to confirm the compensation adjustment range. While guaranteeing the compensation effect, new coverage holes and infinite iterative adjustment problems are avoided to ensure the overall network stability. Solution coverage rate >95%



Automatic Solution (Automatic Restoration of Neighbor Cell RF Compensation)



Principle of the coverage compensation algorithm: Determine the optimal coverage compensation solution





Question

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

Fault scenarios include NE disconnection or out-of-service, cell faults, and fronthaul network faults.

区域五

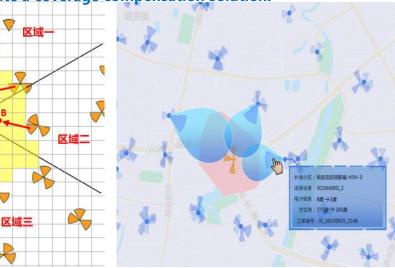
区域四

	Option A	Option B	Option C	Option D
Options	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.	

Solution decision-making through the coverage compensation platform: For an out-of-service site, the system obtains the strongest neighbor
 cell list based on historical MR measurement data, and intelligently analyzes and determines the best neighbor cell beam weight and power adjustment solution. The accuracy of the coverage compensation solution is >95%.



The coverage compensation platform decides to generate a coverage compensation solution.



The rear evaluation module of the coverage compensation <u>platform</u> automatically evaluates the coverage



Coverage compensation traffic recovery evaluation

Solution Implementation



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

Question Fault scenarios include NE disconnection or out-of-service, cell faults, and fronthaul network faults.

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

- For specified alarms, the AIOPS platform automatically sends instructions to implement self-repair functions such as remote board reset and base station reset, and the success rate of remote repair is >95%.
- Coverage compensation platform: Based on the coverage compensation solution generated through intelligent analysis, after a physical site is out of service, the system automatically delivers and adjusts cell parameters through the parameter platform to recover rescue coverage in the original coverage area of the out-of-service site. The solution implementation automation rate is >95%, and the automatic implementation success rate is >95%.

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	Ο.	2024-12-27 18:31:45	华为	5G	460-00	RST BTSN	IODE:;	基站复位	成功	/data/C	运程接口	240	< 详情
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Example 1: Base Station Reset

⑦ 預差补偿系统	夏 酸盐补偿 /	补偿工单查询		olution		ighbor cell		25 🍥
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3 退服要盖补偿	派单时间:	2025-01-07	至 2025-01-1	6				
▶ 計信黑名単	指纹ID:	请输入指纹ID	关键字检索:					
								nentatior
》 实时监控	工单编号	派单时间		地市名称	设备厂家名称	Tesuit: 過服基站名称	Success 补偿状态	指纹ID
	1 H11561440202	2025-01-17	23:00:00	還州市	华为	H11561440-龙湾瓯江口瓯华路霓明路-H_	补偿成功	30993_17369
▶ 补偿后评估	2 H11600189202	2025-01-15	18:06:38	杭州市	华为	H11600189-杭州萧山所前越家-H5H	补偿成功	44866_17369
	3 愿城汇商大厦	€FDD1800 2025-01-17	16:45:33	温州市	华为	鹿城汇嘉大厦东FDD1800_8	补偿成功	29056_17369
	4 H1153804781	₩減減機業 2025-01-15	16:38:51	杭州市	华为	H11538047杭州湖滨银泰三期LY湖滨银	补偿成功	60514_17369
	5 H59172420250	01500001 2025-01-16	15:17:48	金华市	华为	H591724-永康永车轨道交通公司-HLH	补偿成功	51234_17369
	4			Tale 111 alter	114.50	In the second station (second states (second	1 (No	

Implementation Example 2: Neighbor





Thank you

