

Cloud Network Management System Manual of Tetra Repeater

Cloud Network Management System is built on the B/S framework, with features like low cost, mobility, faster speed and easy to operate. Its system architecture is shown below:



First, we installed the management software on the cloud service platform, then connect the repeater to the cloud server platform via the Internet, in this way, we can log in to the cloud service platform anywhere to operate the repeater, including querying the real-time status of the repeater, setting the parameters of repeater remotely and so on; Please refer to the instructions below for detailed operation:



i. Log In the Cloud Monitoring Platform

a) Open a browser on your computer or mobile phone and type in the URL((http://118.163.153.117) this is the test platform, and we usually recommend that clients rent cloud server and install monitoring software as their own monitoring platform) in the browser address bar, and enter the user name(Admin) and password(123456) to log in.





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ii. Create the Monitoring Site/Repeater

a) To add Site/Repeater, click the Equipment Add on the left Menu Bar, fill in Site ID,SUB ID and Site Name,the Site ID must be the same as the ID of the repeater itself (which was set by local before),and Sub ID must be 255 for RF repeater, select UDP as the communication mode, keep the default values for the other parameters,finally click OK to save.

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quipment Add	"Site ID[Decimal]	12345678	
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ser List ser Add	Sub Device Number	۰ ۷	
olling	Device Type	1 Wideband Repeater	
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olling Add	Site Name	1	
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b) After adding a Site, it will appear automatically in the Equipment List. Then we can operate repeater: the Edit button on the right of the corresponding Repeater to rewrite the properties, and the Delete button to remove the selected Repeater.

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iii. Repeater Configuration Management

a) Click **Operation** button on the right of the corresponding Repeater to set the Repeater with the following details, Click **Query Paramater List** to get the list of parameters from the repeater.



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The process of getting the parameter list is shown in the figure below

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b) To query/set the Repeater with the following details: The **Repeater Info** page can be inquired of some basic parameters of the Repeater.



Welcome, admin! [Log out]

	epeater Info Monitor Info Alarm Enable Alarm Info	RF Para RF Status Misc Status 1			Query Paramater List	nquiry Setting
lser	Parameter	Remote Value	Unit	Time	Status	Туре
lser List	Manufacturer				Success	3
lser Add	Device Type				Success	3
Polling	Model Number				Success	2
Colling List	Product SN				Success	2
olling Add	Actual Channel Counts				Success	3
olling History	Longitude				Success	6
ogs	Latitude				Success	7
larm Logs	Firmware Version		0		Success	2
peration Logs configure rotocal Parameter bout Us	Firmware Version		0		Success	2

c) The Monitor Info page can be inquired of and set the monitor parameters of the Repeater. For setting, it needs to double click the blank space corresponding to the item under the Remote Value. For example, to modify the Site ID needs to double click the below red marked field, then input the new Site ID and click Setting to save changes.

Repeater	Networ	k Manag	ement S	ystem
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uipment Add	F	Repeater Info Monitor Info Alarm Enable Alarm Info	RF Para RF Status Misc Status	2	Query Parama	ter List Inquiry	Settin
er		Parameter	Remote Value	Unit	Time	Status	Тур
r List		Site ID	2		2019-12-16 17 16 43	Success	5
r Add		Equipment Number	255		2019-12-16 17:16:43	Success	3
ling		Monitor IP Address	4		2019-12-16 17:16:43	Success	9
ling List		Monitor IP Port	20750		2019-12-16 17:16:43	Success	4
ling Add		GPRS Enable	1		2019-12-16 17:16:43	Success	11
ling History		GPRS APN	0		2019-12-16 17 16:43	Success	8
		GPRS ???	0		2019-12-16 17 16 43	Success	8
m Logs		GPRS ??	0		2019-12-16 17:16.43	Success	8



Welcome, admin! [Log out

d) The Alarm Enable page can be query of and set alarm enable/disable. For setting, it needs to double click the corresponding alarm item under the Remote Value, and select Enable or Disable (alarm blocked) in the dropdown menu. Generally the status will be Enable (alarm activated) by default.

Repeater Network Management System

pment Add	Repeater Info Monitor Info Alarm Enable Alarm Info RF Para RF Status	Misc Status 3					
r		Enable A	II Disable A	II Query Para	amater List Inquiry	Setting	
List	Parameter	Remote Value	Unit	Time	Status	Туре	
Add	Master Power Failure Enable	Disable			Success	11	
ling	Power Module Alarm Enable	Disable			Success	11	
ing List	Over Temp. Alarm Enable	Disable			Success	11	
ing Add	PLL Unlock Enable	Disable			Success	11	
ing History	UL PA Failure Enable	Disable			Success	11	
5	DL PA Failure Enable	Disable			Success	11	
= Logs	Band1/ CH1 DL Over I/P Alarm Enable	Disable			Success	11	
ation Logs 5	Band1/ CH1 DL Low I/P Alarm Enable	Disable			Success	11	
ligure	Band1/ CH1 DL Over O/P Alarm Enable	Disable			Success	11	
ocal Parameter	Band1/ CH1 DL Low O/P Alarm Enable	Disable			Success	11	
t Us	Band1/ CH1 DL PA VSWR Alarm Enable	Disable			Success	11	
	Band1/ CH1 UL Over O/P Alarm Enable	Disable			Success	11	
	Door Open Alarm Enable	Disable			Success	11	

e) The **Alarm Info** page can be query of the realtime alarm status of the repeater. Select the all alarm item and click Inquiry to check. Under good running circumstances, it will display Normal; but when certain parameter alarms, it will display Alarm instead.

Equipment	_						
Squipment List	D	evice Operation: Site Name: 1 Site ID:2 Sub ID:255 Repeater Info Monitor Info Alarm Enable Alarm	Info RF Para RF Status M	lisc Status 4	Qu	ery Paramater List Inquiry	Setting
User		Parameter	Remote Value	Unit	Time	Status	Туре
ser List		Master Power Failure	Alarm		2019-12-17 10:03:02	Success	12
iser Add		Power Module Alarm	Normal		2019-12-17 10:03:02	Success	12
olling		Over Temp. Alarm	Normal		2019-12-17 10:03:02	Success	12
olling List		PLL Unlock	Normal		2019-12-17 10:03:02	Success	12
olling Add		UL PA Failure	Normal		2019-12-17 10:03:02	Success	12
olling History		DL PA Failure	Normal		2019-12-17 10:03:02	Success	12
ogs		Band1/ CH1 DL Over I/P Alarm	Normal		2019-12-17 10.03.02	Success	12
larm Logs		Band1/ CH1 DL Low I/P Alarm	Normal		2019-12-17 10:03:02	Success	12
peration Logs		Band1/ CH1 DL Over O/P Alarm	Normal		2019-12-17 10:03:02	Success	12
mfigure		Band1/ CH1 DL Low O/P Alarm	Normal		2019-12-17 10:03:02	Success	12
stocal Parameter		Band1/ CH1 DL PA VSWR Alarm	Normal		2019-12-17 10:03:02	Success	12
out Us		Band1/ CH1 UL Over O/P Alarm	Normal		2019-12-17 10:03:02	Success	12
	M	Door Open Alarm	Alarm	0	2019-12-17 10:03:02	Success	12



f) The **RF Para** page can be inquired of and set the frequency /gain and alarm threshold of the Repeater.

Parameter Resource List Outor Image: Notice Coperation: Site Name 1 Site ID 2 Sub	ut]	elcome, admin! [Log o	We		System	twork Management S	Ne	Repeater
Image: section of the section of th	Setting	Paramater List Inquiry	Query Pa		RF Status Misc Status 5	e Operation: Site Name 1 Site ID 2 Sub ID 255 seater Info Monitor Info Alarm Enable Alarm Info RF Para	Devic	Equipment Equipment List Equipment Add
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	17	Success		dBm		Band1/ CH1 DL Low I/P Limit		
Band1/CH1 DL Over I/P Limit dBm Success	17	Success		dBm		Band1/ CH1 DL Over I/P Limit		
Band1/CH1DLLowOPLimit dBm Success	17	Success		dBm		Band1/ CH1 DL Low O/P Limit		
Band1/CH1DLOver O.P.Limit dBm Success	17	Success		dBm		Band1/ CH1 DL Over O/P Limit		

g) The **RF Status** page can be inquired of the real-time status of the repeater, including RF input/output power, etc.

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User Management

a) User List can be checked and modify the user list.

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b) **User Add** can be used to add new user, which involves three permission levels:

First, Admin – Administrator permission, it can either add or delete repeaters, or set and inquiry of the repeater parameters, as well as add/modify other users.

Second, User – User permission, can set and inquiry of the Repeater parameters;

Third, Guests – Guest permission, can only read the Repeater parameters but unable to set and modify them.



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iv. Site/Repeater Polling

a) Polling Add, select the repeater and parameters to be polled, then select the polling time, and then automatically query the selected repeater parameters in the set time period.

Reneater	Network Man	agement System	m	
Repeater	reenone man	ugement byster		Welcome, EMTS! [Log out]
Equipment Equipment List Equipment Add Weer Weer Weer Weer Torer Add Polling Polling Polling Folling List Folling Add Folling Folling Add Folling Folling Add Folling Fol	Site Select Poling Tree Refy Poling Parameter	[Ste Select] (0 00 00 - 00 59 59 1	्र च च	Velcome, EMISI [Log out]
Configure Protocal Parameter About Us				
		OK CANCEL		

b) Polling List, the parameters for successful polling can be checked in the polling history.



Velcome, EWTS! [Log out]

Repeater Network Management System

gaipment List gaipment Add	Policy Hatory. ID(State () Search State (年/月/日) 0 End 年/月/日) 0 Search Export										
	0	Site ID	Sub ID	Site Name	Moid	Parameter	Value	Time	Operation		
er List		1000004	255	Keppel Shipyard	0x0506	Band1/ CH1 DL PA VSWR	1.2	2021-05-17 10:00:31	Delete		
er Add		10000004	255	Keppel Shipyard	0x0505	Band1/ CH1 DL Gain	89	2021-05-17 10:00:31	Delete		
olling		10000004	255	Keppel Shipyard	0x0504	Band1/ CH1 UL Max. Gain	62	2021-05-17 10:00:31	Delete		
lling List	0	10000004	255	Keppel Shipyard	0x050D	Band1/ CH1 UL OIP	0	2021-05-17 10:00:31	Delete		
alling Add		10000004	255	Keppel Shipyard	0x0503	Band1/ CH1 DL OIP	39	2021-05-17 10:00:31	Delete		
arring meeting		10000004	255	Keppel Shipyard	0x0502	Band1/ CH1 DL I/P	-50	2021-05-17 10:00:31	Delete		
1		10000004	255	Keppel Shipyard	0x0501	PA Temp	49	2021-05-17 10:00:31	Delete		
eration Loss	0	10000004	255	Keppel Shipyard	0x0328	Door Open Alarm	Normal	2021-05-17 10:00:31	Delete		
unfieure		10000004	255	Keppel Shipyard	0x0315	Band1/ CH1 UL Over O/P Alarm	Normal	2021-05-17 10:00:31	Delete		
ntoral Parameter		10000004	255	Keppel Shipyard	0x0314	Band1/ CH1 DL PA VSWR Alarm	Normal	2021-05-17 10:00:31	Delete		
out Us		10000004	255	Keppel Shipyard	0x0313	Band1/ CH1 DL Low O/P Alarm	Normal	2021-05-17 10:00:31	Delete		
	0	10000004	255	Keppel Shipyard	0x0312	Band1/ CH1 DL Over O/P Alarm	Normal	2021-05-17 10:00:31	Delete		

Repeate	r Ne	etwor	k Mana	igemei	nt System		-	Velcome	, ENTS! [Log out]
C Equipment	Po	olling List							New Polling
Equipment ådd	ID	Area ID	Site ID	Sub ID	Site Name	Polling Time	Attempts	Status	Operation
User .	27	1	10000001	255	Grandlink Square	10:00:00 ~ 10:59:59	3	Success	Details Deleto
User List User Add	30	1	10000004	255	Keppel Shipyard	10:00:00 ~ 10:59:59	3	Success	Details Delete
Polling									

User Aus Polling List Polling kist Polling History Legs Alara Logs Operation Loge Configure Protocal Parame About Ds

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v. Log Management

a) Alarm List lists out the alarm history.

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ther .	0	Batus.	Area.	Six D	Sub D	Site Name	Adarts Name	Time	Operation	
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Total And	17		0		216	1	Barelli CHODI, Low OP Alam	2019-12-28 14:37-45	Coloma	
Pulling	0		0	8	255	1	BandS-CHO DI, Low O/P Alarm	2010/12/26 14:37/22	Detato	
Pulling Line	1		0	8	255	1	Band2 CH2 DL Low DR' Alamy	2019-12-29 14:38:29	Owhere	
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illust Ca	0		8		215	1	Band21 CHIE DL. Low D/P Alerm	2010-12-38.14:32:17	Overes	
	13		0	40	218	16.1	Over Tangi Alam	2019-12-26 14:00:01	Outube	

b) **Operation Logs** record the overall operation history to the Repeater.

	Welcome, admi										
uipment Aipment List Aipment Add	A	Narm List. Search by Area IE	Area ID	Search by	Site ID Site ID	Search Record					
ır.		Area Id	Site Id	Sub Id	Site Name	Parameter	Parameter Value	Time	Operation		
r List		0	0	255	1	Channel 1 Switch	1	2019-12-26 14:34:04	Delete		
r Add		0	0	255	1	Channel 1 Switch	Ö	2019-12-26 14:33:35	Delete		
ling		0	0	255	1	Band Width CH4	19.200001	2019-12-26 14:32:55	Delete		
ling List		0	0	255	1	Channel 2 Switch	1	2019-12-26 14 31 55	Delete		
ling Add		0	0	255	1	Channel 6 Switch	1	2019-12-26 14:29:30	Delete		
s		0	0	255	1	Channel 5 Switch	1	2019-12-26 14:29:30	Delete		
n Logs		0	0	255	1	Channel 5 Switch	0	2019-12-26 14:28:59	Delete		
ation Logs		0	0	255	1	Channel 6 Switch	1	2019-12-26 14:28:26	Delete		
figure		0	0	255	1	Channel 5 Switch	1	2019-12-26 14:28:26	Delete		
ocal Parameter		0	0	255	1	Channel 4 Switch	1	2019-12-26 14:28:26	Delete		
it Us		0	0	255	1	Channel 5 Switch	1	2019-12-26 14.25:52	Delete		
		0	0	255	1	Channel 4 Switch	0	2019-12-26 14:25:52	Delete		