

# Запуск БС Huawei

Настройка FTP на Windows 7 по ссылке  
<https://www.q2w3.ru/nastrojka-ftp-servera-iis-na-windows-7/>

или в LMT во вкладке FTP tool (сертификат SSL не создаем), брандмауэр отключаем.

Каталог FTP не надо прятать в дебри диска, оптимально в корне, например  
e:\FTP\

Для Windows 10 настройки аналогичны, но лучше Win7 т.к на лицензионной обновленной Win 10 надо постоянно отключать брандмауэр и defender или настраивать исключения.

Ip для подключения **192.168.0.49**

Для 15 релиза и старше:

Логин: Admin

Пароль: hwbs@com

Для релиза 16 пароль Y5\$7Kc@u#\$tr&LhF (после первого включения требует смены, добавляем в конце 11 получаем **Y5\$7Kc@u#\$tr&LhF11**)

# Для DBS

командой SET NODE переводим в BTS5900A (нужный тип оборудования выставится после заливки выданного конфига, BTS5900A выбираем для настроек безопасности FTP порта управления VBU)

далее командой SET FTPSCLT выставляем всё как на картинке

The screenshot displays the web interface of a BTS5900-GL device. The browser address bar shows the URL: `https://192.168.0.49/platform/framework/view/index.html?2020.07.03.13&time=1617802812344`. The page title is "BTS5900-GL". The navigation menu includes "MML", "Alarm/Event", "Batch", "Trace", "Monitor", "Device Maintenance", and "Self Test". The "Workspace" is set to "MML".

The main content area shows the execution of the `SET FTPSCLT` command. The output is as follows:

```
RETCODE = 0 Operation succeeded.
---
END
+++ BTS_77_21948_DLN 2021-04-07 17:46:33
OMR #008
%%SET FTPSCLT :%%
RETCODE = 0 Operation succeeded.

FTP Client Parameter List
-----
Transport Encrypted Mode = Auto
Support State Firewall = Yes
Support SSL Certificate Authentication = No
Minimum DH length of FTPS = Auto Diffie-Hellman
Policy ID = 0
TLS Secure Cipher Suite Switch = OFF
(Number of results = 1)
---
END
```

Below the output, the configuration parameters for `SET FTPSCLT` are shown:

```
SET FTPSCLT: ENCRYPMODE=Auto, SPTSTATEFWL=Yes, SSLCERTAUTH=No, MINDHLEN=DH_0, POLICYID=0, TLSSECCSSW=OFF;
```

The configuration form includes the following fields:

- Command History: SET FTPSCLT
- Command (F5): SET FTPSCLT
- Transport Encrypted Mode: Auto(Auto)
- Support State Firewall: Yes(Yes)
- Support SSL Certificate Authentication: No(No)
- Minimum DH length of FTPS: DH\_0(Auto Diffie-Hellman)
- Policy ID: 0
- TLS Secure Cipher Suite Switch: OFF(OFF)

The interface also features a "Navigation Tree" on the left side, listing various system management and application management tasks. The bottom status bar shows the time as 17:47.

Обновление софта:

Проверяем залитую версию софта командой LST SOFTWARE, если отличается от BTS3900\_5900 V100R016C10SPC130 – обновляем, если ок – переходим к заливке конфига.

При правильно настроенном FTP сервере, **FTP Server IP** это локальный IP компьютера 192.168.0.\* (тот что прописали в свойствах IPv4 сетевой карты для подключения к BTS) **User Name** – имя пользователя с созданного для FTP, **Password** – пароль пользователя с созданного для FTP

В Software Version пишем полное название софта: BTS3900\_5900 V100R016C10SPC130

В маршруте до софта корневую папку FTP не учитываем, т.е если полный маршрут e:\ftpserver\BTS3900\_5900 V100R016C10SPC130\, в Directory Name прописываем BTS3900\_5900 V100R016C10SPC130\

Пример команды(пропущен пароль, не забываем вводить):

DLD SOFTWARE: MODE=IPV4, IP="192.168.0.20", USR="Rus", DIR="BTS3900\_5900 V100R016C10SPC130\", SWT=SOFTWARE, SV="BTS3900\_5900 V100R016C10SPC130", ATL=GBTS&eNodeB;

Если БС 2G+LTE то софт заливаем для GBTS и eNodeB (вкладка Application Type List)

The screenshot shows the web interface of a BTS5900A device. The browser address bar displays the URL: `https://192.168.0.49/platform/framework/view/index.html?2020.03.02.09&time=1615274308281`. The page title is "BTS5900A". The navigation menu includes "MML", "Alarm/Event", "Batch", "Trace", "Monitor", "Device Maintenance", and "Self Test". The "Device Maintenance" tab is active, and the "Common Maintenance (Alt+C)" sub-tab is selected. The main content area shows the execution of the command `DLD SOFTWARE: MODE=IPV4, IP="192.168.0.20", USR="Rus", DIR="BTS3900_5900 V100R016C10SPC130\", SWT=SOFTWARE, SV="BTS3900_5900 V100R016C10SPC130", ATL=GBTS&eNodeB;`. The output shows a successful download of software for the specified application type. The command history at the bottom shows the command being entered and executed.

## Активация софта

Если БС 2G+LTE то софт активируем для GBTS и eNodeB (вкладка Application Type List)

ACT SOFTWARE: OT=NE, SWT=SOFTWARE, SV="BTS3900\_5900 V100R016C10SPC130", ATL=GBTS&eNodeB;

The screenshot displays the web interface for a BTS5900A device. The browser address bar shows the URL: `https://192.168.0.49/platform/framework/view/index.html?2020.03.02.09&time=1615274308281`. The page title is "BTS5900A". The user is logged in as "admin" with the status "Connected".

The interface is divided into several sections:

- Navigation Tree:** A sidebar on the left containing a list of MML Commands under "System Management". The "Activate Software(ACT SOFTWARE)" command is highlighted.
- Common Maintenance (Alt+C):** The main content area displays the execution results for the "ACT SOFTWARE" command. The output shows the command was executed successfully on 2021-03-09 at 15:43:30. The report type is "Activate Software", the status is "Progressing", and the progress is at 17%. The session ID is 65564.
- Command History:** A section at the bottom of the main area with input fields for "Command (F5)" and buttons for "Assist", "Exec", and "Use Proxy MML".

The bottom of the screenshot shows the Windows taskbar with the system clock at 10:43.

После активации софта LMT будет урезанный!

Активация нормального LMT (здесь, выше и далее указаны параметры моего сервера, меняем данные на свой) – вводим команду SPL SOFTWARE -> кнопка Assist -> заполняем поля (DIR – 'папка где расположен софт, аналогично обновлению):

SPL SOFTWARE: MODE=IPV4, IP="192.168.0.20", USR="Rus", PWD="\*\*\*\*\*", DIR="BTS3900\_5900 V100R016C10SPC130\", SDL=YES;

Перезапускаем LMT.

The screenshot displays the LMT web interface for a BTS5900A device. The browser address bar shows the URL: `https://192.168.0.49/platform/framework/view/index.html?M2020.07.03.13&time=1615276727326`. The page title is "BTS5900A". The user is logged in as "admin" with a status of "Disconnected".

The interface features a navigation tree on the left with the following structure:

- MML Commands
  - System Management
    - Software Query
    - Software Management
      - Download Software(DLD SOFTW)
      - Activate Software(ACT SOFTW)
      - Supplement Software(SPL SOFTW)
    - File Management
    - Alarm Management

The main content area shows the "Common Maintenance (Alt+C)" tab. The terminal output displays the following information:

```
Progress = 100%
Session ID = 65539
--- END
+++ 0 2021-03-09 16:03:43
Oid #80
%%SPL SOFTWARE: MODE=IPV4, IP="192.168.0.20", USR="Rus", PWD="*****", DIR="BTS3900_5900 V100R016C10SPC130\", SDL=YES%%
RETCODE = 0 Progress report, Operation succeeded.
Report Type = Supply Software
Status = Success
Session ID = 65539
--- END
```

At the bottom of the interface, the "Command History" section shows the command: `SPL SOFTWARE: MODE=IPV4, IP="192.168.0.20", USR="`. The "Command (F5):" field contains `SPL SOFTWARE`. There are "Assist" and "Exec" buttons next to the command field.

## Загрузка файла конфигурации

DLD CFGFILE: MODE=IPV4, IP="192.168.0.20", USR="Rus", PWD="\*\*\*\*\*", DIR="BTS\_77\_17351\_DLN\", FN="CFGDATA", ENCRYPTMODE=UNENCRYPTED;

File Name забивать полностью, с расширением - CFGDATA.XML

Корневой каталог FTP в Directory Name как и при заливке софта не указываем.

Остальное как на картинке ниже.

The screenshot shows the web interface of a BTS5900A device. The browser address bar displays the URL: `https://192.168.0.49/platform/framework/view/index.html?2020.07.03.13&time=1615277129827`. The page title is "BTS5900A". The navigation menu includes "MML", "Alarm/Event", "Batch", "Trace", "Monitor", "Device Maintenance", and "Self Test". The "MML" tab is active, and the "File Management" section is expanded in the left sidebar, with "Download Backup Configuration" selected. The main content area shows the command: `DLD CFGFILE: MODE=IPV4, IP="192.168.0.20", USR="Rus", PWD="*****", DIR="BTS_77_17351_DLN\", FN="CFGDATA", ENCRYPTMODE=UNENCRYPTED;`. Below the command, there is a "Command History" section and a "Command (F5)" section with the following fields:

IP Mode	IPV4(IPv4)	FTP Server IP	192.168.0.20
User Name	Rus	Password	*****
Directory Name	BTS_77_17351_DLN\	File Name	CFGDATA
File Type	XML(XML Format)	Area Flag	STANDBY(Standby)
Gauge Option	Y(Send Progress)	Encrypted Mode	UNENCRYPTED(UNENCR)
Compress Flag	UNCOMPRESSED(Uncomj)	Forced Download Flag	FALSE(FALSE)

Активация файла конфигурации:

ACT CFGFILE: EFT=AFTER\_RESET;

The screenshot displays the web interface for the BTS5900A system. The browser address bar shows the URL: `https://192.168.0.49/platform/frmwork/view/index.html?2020.07.03.13&time=1615277129827`. The page title is "BTS5900A". The navigation menu includes "MML", "Alarm/Event", "Batch", "Trace", "Monitor", "Device Maintenance", and "Self Test". The user is logged in as "admin" with the status "Connected".

The main content area is divided into several sections:

- Navigation Tree:** A sidebar menu with categories like "MML Commands", "System Management", "Version Management", "Time Management", "Configuration Management", "License Management", "Application Management", and "File Management".
- Common Maintenance (Alt+C):** A section showing the execution details of the "ACT CFGFILE" command. It includes fields for "Status" (Start), "Session ID" (65541), and "Report Type" (Activate). The status is "Success".
- Command History:** A text area showing the command "ACT CFGFILE: EFT=AFTER\_RESET;".
- Command (F5):** A field containing the command "ACT CFGFILE".
- Mode:** A dropdown menu set to "XML(XML Mode)".
- Effect Type:** A dropdown menu set to "AFTER\_RESET(After Resc)".
- Product Type:** A dropdown menu.

At the bottom of the interface, there are buttons for "Save Result", "Download Report", "Auto Scroll", and "Clear All (F6)". The system tray at the bottom right shows the time as 11:14.

Перезапуск БС после активации файла:

RST BTSNODE: FOCRST=YES;

The screenshot displays the web interface for a BTS5900A device. The browser address bar shows the URL: `https://192.168.0.49/platform/frmwork/view/index.html?2020.07.03.13&time=1615277129827`. The page title is "BTS5900A". The navigation menu includes "MML", "Alarm/Event", "Batch", "Trace", "Monitor", "Device Maintenance", and "Self Test". The user is logged in as "admin" with a status of "Connected".

The main content area shows the "Common Maintenance (Alt+C)" tab. The "Operation Records (Alt+R)" section displays the following details:

```
RETICODE = 0 Progress report, Operation succeeded.
Report Type = Activate
Status = Success
Session ID = 85541
--- END
+++ 0 2021-03-09 16:19:00
O&M #96
%RST BTSNODE: FOCRST=YES;%
RETICODE = 0 Operation succeeded.
--- END
```

Below the operation records, there are buttons for "Save Result", "Download Report", "Auto Scroll", and "Clear All (F6)".

The "Command History" section shows the command: `RST BTSNODE: FOCRST=YES;`. The "Command (F5)" field contains `RST BTSNODE`, and the "Forced Reset Flag" is set to `YES(YES)`. There are "Assist" and "Exec" buttons next to the command field.

The left sidebar contains a "Navigation Tree" with various menu items, including "Reset Base Station(RST BTS)", "Export Inventory File(EXP DE)", "Upload Inventory File(ULD D)", "Set Direct Voltage Alarm Swit", "List Direct Voltage Alarm Swit", "Set NE Equipment Configurat", "List NE Equipment Configurat", "Set NE Status(SET MNTMOI", "List NE Status(LST MNTMOI", "Display Current NE Status(D", "Scan RS485 Bus(SCN RS485", "Add Cabinet(ADD CABINET)", "Remove Cabinet(RMV CABIN", "Modify Cabinet(MOD CABIN", "List Cabinet(LST CABINET)", "Display Cabinet Manufacturin", "Add Subrack(ADD SUBBRACK", "Remove Subrack(RMV SUBRA", "Modify Subrack(MOD SUBRA", "List Subrack(LST SUBBRACK", "Set PSU Intelligent Shutdown", "List PSU Intelligent Shutdown", "Set Energy Consumption Me", "List Energy Consumption Me", "Add Control Link(ADD CTRL", "Remove Control Link(RMV C", "Modify Control Link(MOD CTI", "List Control Link(LST CTRL", "Display Control and Clock Sgi", "Set HA Switch(SET HASW)", "Display HA Switch Status(DSI", "Add Base Band Processor Lr", "Remove Base Band Process", "Modify Base Band Processor", "List Base Band Processor Lin", "Display the actual informator", "Display Board Remain Time()", "Set Network Element Configu", "List Network Element Configu", "Set Node Configuration(SET", "List Node Configuration(LST I", "Add Location(ADD LOCATIO", "Remove Location(RMV LOCA



## Заливка лицензии

INS LICENSE: DIR="1\", FN="IoTDBS5900LTE\_V100R016\_20210217VKTH6L.xml", FLG=NO, MODE=IPV4, IP="192.168.0.20", USR="Rus", PREFLG=NO;

Корневой каталог FTP в Directory Name как и при заливке софта не указываем.

Затем активируем INS LICENSE и полное название файла лицензии с расширением.

The screenshot displays the web interface of a BTS5900-GL device. The browser address bar shows the URL: `https://192.168.0.49/platform/frmwork/view/index.html?2020.07.03.13&time=1615282096354`. The page title is "BTS5900-GL".

The interface includes a navigation menu on the left with categories like "MML Commands", "System Management", "Configuration Management", and "License Management". The "License Management" section is expanded, showing options such as "Install License(INS LICENSE)".

The main content area shows the execution of the "INS LICENSE" command. The command history displays the full command: `INS LICENSE: DIR="1\", FN="IoTDBS5900LTE_V100R016_20210217VKTH6L.xml", FLG=NO, MODE=IPV4, IP="192.168.0.20", USR="Rus", PREFLG=NO;`. The command is currently set to "Assist" mode.

Below the command history, there are input fields for configuring the command: "Directory Name" (1\), "File Name" (IoTDBS5900LTE\_V100R016\_20210217VKTH6L.xml), "Force Flag" (NO), "IP Mode" (IPV4), "FTP Server IP" (192.168.0.20), "User Name" (Rus), "Password" (empty), "Function Type" (AUTO), and "Preload Flag" (NO).

The execution results show a successful installation: `Report Type = Install License, Status = Progressing, Progress = 100%, Session ID = 65556`. A summary line at the bottom of the results area repeats the command: `INS LICENSE: DIR="1\", FN="IoTDBS5900LTE_V100R016_20210217VKTH6L.xml", FLG=NO, MODE=IPV4, IP="192.168.0.20", USR="Rus", PREFLG=NO;`

Активация emergency (если не выданы лицензии или лицензии не заливаются):

SET LICENSECTRL: FUNCTIONTYPE=GBTS;

SET LICENSECTRL: FUNCTIONTYPE=eNodeB;

The screenshot displays the web interface for the BTS5900-GL system. The browser address bar shows the URL: `https://192.168.0.49/platform/frmwork/view/index.html?2020.07.03.13&time=1615278133002`. The page title is "BTS5900-GL".

The main content area is titled "Common Maintenance (Alt+C)" and "Operation Records (Alt+R)". The "Display OM Channel State" section shows the following parameters:

- Standby Status = Master
- VRF Index = 0
- Bearer Type = IPV4
- Local IP = 11.128.88.6
- Local Mask = 255.255.255.252
- Peer IP = 11.127.3.1
- Peer Mask = 255.255.255.224
- Binding Route = No
- Binding Secondary Route = No
- Check Type = NONE
- OM Channel Status = Abnormal
- Used State = In Use

The "Command History" section shows the following commands:

- Command (F5): DSP OMCH;
- SET LICENSECTRL: FUNCTIONTYPE=eNodeB;
- SET LICENSECTRL: FUNCTIONTYPE=GBTS;**
- DSP VSWR;
- DSP SECTOR;

The interface also includes a navigation tree on the left, a search bar, and various utility buttons like "Save Result", "Download Report", "Auto Scroll", and "Clear All (F6)".

# Активация и настройка RET

- Моторы можно настроить только после подачи канала управления, при его отсутствии RRU через 3-5 минут уходят в режим Standby, по команде DSP RETPORT выдает что RRU недоступны.

Проверка портов:

DSP RETPORT;

The screenshot shows the web interface of a BTS5900-GL device. The browser address bar shows the URL: `https://192.168.0.49/platform/framework/view/index.html?2020.07.03.13&time=1615383627178`. The page title is "BTS5900-GL". The user is logged in as "Local User: admin" with a status of "Connected" and a time of "2021-3-10 16:43:08".

The main content area displays the execution of the "Display RET Port(DSP RETPORT)" command. The output shows the following table:

Cabinet No.	Subrack No.	Slot No.	Port No.	ALD Actual Power Switch	ALD Current Value(mA)
0	180	0	RET_PORT	ON	36
0	181	0	RET_PORT	ON	36
0	182	0	RET_PORT	ON	37

Below the table, it indicates "(Number of results = 3)" and "END".

The interface also includes a navigation tree on the left with categories like "MML Commands", "System Management", "Equipment Management", "Base Station Maintenance", "Board Maintenance", "RRU Maintenance", and "ALD Maintenance". The "Display RET Port(DSP RETPORT)" command is highlighted in the tree.

At the bottom, there is a "Command History" section with a search box and a "Command (F5):" input field. The "Assist" and "Exec" buttons are visible.

Если ALD Actual Power Switch в значении OFF:

MOD RETPORT: CN=0, SRN=180, SN=0, PWRSWITCH=ON, THRESHOLDTYPE=RET\_ONLY\_MULTICORE;

Команду вводим для каждого RRU, меняется только значения Subrack No. (180, 181, 182 и т.д в зависимости от количества RRU)

The screenshot displays the web interface for the BTS5900-GL. The browser address bar shows the URL: `https://192.168.0.49/platform/frmwork/view/index.html?2020.07.03.13&time=1615383627178`. The page title is "BTS5900-GL".

The interface includes a navigation tree on the left with the following structure:

- MML Commands
  - System Management
  - Equipment Management
    - Base Station Maintenance
    - Board Maintenance
    - RRU Maintenance
    - ALD Maintenance
      - Modify Antenna Port(MOD A
      - List Antenna Port(LST ANTEI
      - Display Antenna Port(DSP AN
      - Confirm TMA Connection(CFI
      - Modify RET Port(MOD RETP
      - List RET Port(LST RETPORT
      - Display RET Port(DSP RETPC
      - Scan ALD(SCN ALD)
      - Reset ALD(RST ALD)
      - Reset ALD Power Switch(RST
      - Download ALD Software(DLD
      - Stop Scanning ALD(STP ALD:
      - Display ALD Version(DSP ALI
      - Add RET(ADD RET)
      - Remove RET(RMV RET)
      - Modify RET(MOD RET)
      - List RET(LST RET)
      - Display RET(DSP RET)
      - Calibrate RET(CLB RET)
      - Download RET Configuration
      - Modify RET Subunit(MOD RE
      - List RET Subunit(LST RETSU
      - Display RET Subunit(DSP RE
      - Modify RET Tilt(MOD RET TI
      - Modify RET Device Data(MO
      - List RET Device Data(LST RE
      - Display RET Device Data(DSI
      - Modify VRET Configuration(M
      - List VRET Configuration(LST
      - Modify VRET Subunit Configu
      - List VRET Subunit Configurati
      - Display VRET Subunit Dynam
      - Add TMA(ADD TMA)
      - Remove TMA(RMV TMA)
      - Modify TMA(MOD TMA)

Поиск моторов:

Команда SCN ALD::;

The screenshot displays the web interface for the BTS5900-GL system. The browser address bar shows the URL: `https://192.168.0.49/platform/frmwork/view/index.html?2020.07.03.13&time=1615383627178`. The page title is "BTS5900-GL".

The interface includes a navigation menu on the left with categories like "MML Commands", "System Management", "Equipment Management", "Base Station Maintenance", "Board Maintenance", "RRU Maintenance", and "ALD Maintenance". The "ALD Maintenance" category is expanded, showing various commands such as "Scan ALD(SCN ALD)".

The main content area shows the execution of the "Scan ALD(SCN ALD)" command. The output is as follows:

```
Session ID = 65550
---  END
+++  BTS_77_21911_DLN      2021-03-10 16:45:05
O&M  #207
W&SCN ALD:;%
RETCODE = 0  Progress report, Operation succeeded.

Report Type = Scan ALD
Status = Progressing
Progress = 1%
Session ID = 65550
---  END
```

At the bottom of the interface, there is a "Command History" section with a search box and navigation arrows, and a "Command (F5):" input field with "Assist" and "Exec" buttons. The "Auto Scroll" checkbox is checked.

Common Maintenance (Alt+C)

Operation Records (Alt+R)

Help (Alt+N)

Control Port Subrack No.	Control Port Slot No.	Control Port No.	Result	ALD Device Type	Vendor Code	Serial No.	Protocol Version	Configure Status
180	0	RET	SUCCESS	SINGLE_RET	MT	AU021K160662T--Y2	AISG2.0	UNCONFIGURED
180	0	RET	SUCCESS	SINGLE_RET	MT	AU021K160662T--Y1	AISG2.0	UNCONFIGURED
181	0	RET	SUCCESS	SINGLE_RET	MT	AU021K160544T--Y2	AISG2.0	UNCONFIGURED
181	0	RET	SUCCESS	SINGLE_RET	MT	AU021K160544T--Y1	AISG2.0	UNCONFIGURED
182	0	RET	SUCCESS	SINGLE_RET	MT	AU021K160537T--Y2	AISG2.0	UNCONFIGURED
182	0	RET	SUCCESS	SINGLE_RET	MT	AU021K160537T--Y1	AISG2.0	UNCONFIGURED

 Save Result

Download R

Command History:



Command (F5):

Assist

Exec

 Use Proxy MML

## Привязка моторов:

ADD RET: DEVICENO=180, DEVICENAME="CELL\_77\_21911\_1\_L18+CELL\_77\_21911\_1\_D", CTRLCN=0, CTRLSRN=180, CTRLSN=0, RETTYPE=SINGLE\_RET, SCENARIO=DAISY\_CHAIN, VENDORCODE="MT", SERIALNO="AU021K160662T--Y1";

Если на антенне 2 встроенных мотора:

### сектор1

Мотор №1: Device No – 180, Control Port Subrack No – 180, Device Name CELL\_77\_21911\_1\_L18+CELL\_77\_21911\_1\_D

Мотор №2: Device No – 380, Control Port Subrack No – 180, Device Name CELL\_77\_21911\_1\_L18\_2+CELL\_77\_21911\_1\_D\_2

### сектор2

Мотор №1: Device No – 181, Control Port Subrack No – 181, Device Name CELL\_77\_21911\_2\_L18+CELL\_77\_21911\_2\_D

Мотор №2: Device No – 381, Control Port Subrack No – 181, Device Name CELL\_77\_21911\_2\_L18\_2+CELL\_77\_21911\_2\_D\_2

### сектор3

Мотор №1: Device No – 182, Control Port Subrack No – 182, Device Name CELL\_77\_21911\_3\_L18+CELL\_77\_21911\_3\_D

Мотор №2: Device No – 382, Control Port Subrack No – 182, Device Name CELL\_77\_21911\_3\_L18\_2+CELL\_77\_21911\_3\_D\_2

Vendor code – из инфы по SCN ALD

Serial No. - из инфы по SCN ALD, ВВОДИМ ПОЛНОСТЬЮ, СО ВСЕМИ ЗНАКАМИ

Остальное как на картинке ниже.

The screenshot shows the web interface for a BTS5900-GL. The main content area displays a table of operation records and a configuration form for adding a RET (Return Error Type).

Device No	Control Port Subrack No	Device Name	RETCODE	Operation	Result	MT	Serial No	Scenario	Vendor Code	Status
181	181	CELL_77_21911_2_L18+CELL_77_21911_2_D	0	RET	SUCCESS	SINGLE_RET	MT	AU021K160662T--Y1	AISQ2.0	UNCONFIGURED
182	182	CELL_77_21911_3_L18+CELL_77_21911_3_D	0	RET	SUCCESS	SINGLE_RET	MT	AU021K160662T--Y2	AISQ2.0	UNCONFIGURED
182	182	CELL_77_21911_3_L18_2+CELL_77_21911_3_D_2	0	RET	SUCCESS	SINGLE_RET	MT	AU021K160662T--Y1	AISQ2.0	UNCONFIGURED

Below the table, the 'ADD RET' configuration form is visible. The command entered is: `ADD RET: DEVICENO=380, DEVICENAME="CELL_77_21911_1_L18_2+CELL_77_21911_1_D_2", CTRLCN=0, CTRLSRN=180, CTRLSN=0, RETTYPE=SINGLE_RET, SCENARIO=DAISY_CHAIN, VENDORCODE="MT", SERIALNO="AU021K160662T--Y2";`

The form fields are filled with the following values:

- Device No: 380
- Device Name: 8\_2+CELL\_77\_21911\_1\_D\_2
- Control Port Cabinet No: 0
- Control Port Subrack No: 180
- Control Port Slot No: 0
- RET Type: SINGLE\_RET(SINGLE\_RE)
- Polar Type: DUAL(DUAL)
- Antenna Scenario: DAISY\_CHAIN(DAISY\_C)
- Vendor Code: MT
- Serial No: AU021K160662T--Y2
- Antenna Form: NORMAL\_ANTENNA(Norr)



Калибровка моторов:

CLB RET: OPMODE=SITE;

На МОВІ может выдать ошибку, ждем минут 5-10 и запускаем заново.

The screenshot displays the web interface for the BTS5900-GL system. The browser address bar shows the URL: `https://192.168.0.49/platform/framework/view/index.html?2020.07.03.13&time=1615383627178`. The page title is "BTS5900-GL". The navigation menu includes "MML", "Alarm/Event", "Batch", "Trace", "Monitor", "Device Maintenance", and "Self Test". The user is logged in as "admin" with a status of "Connected" and a time of "2021-3-10 17:05:00".

The main content area shows the "Common Maintenance (Alt+C)" tab. The "Navigation Tree" on the left lists various MML commands, with "Calibrate RET (CLB RET)" selected. The main display area shows the following output:

```
+++ BTS_77_21911_DLN 2021-03-10 17:02:21
O&M #294
%%CLB RET: OPMODE=SITE,%%
RETCODE = 0 Progress report, Operation succeeded.

Report Type = Calibrate RET
Status = Success
Session ID = 65565

Result
-----
Device No. Subunit No. Result
180 1 SUCCESS
181 1 SUCCESS
182 1 SUCCESS
```

Below the output, there are buttons for "Save Result", "Download Report", "Auto Scroll" (checked), and "Clear All (F6)". The "Command History" section shows the command "CLB RET" entered. The "Operate Mode" is set to "SITE(Operating by Site)".

Установка углов:

MOD RETTILT: RETCLASS=RET, OPMODE=DEVICENO, DEVICENO=380, TILT=40;

команду вводим для каждого мотора, меняется Device No. (180, 181, 182, 380, 381, 382), Tilt=эл.угол\*10 (если в задании угол=4 то вводим значения=40)

The screenshot displays the web interface for the BTS5900-GL system. The browser address bar shows the URL: `https://192.168.0.49/platform/framework/view/index.html?2020.07.03.13&time=1615383627178`. The interface includes a navigation menu on the left with categories like MML Commands, System Management, and Equipment Management. The main content area shows the execution results of the command `MOD RETTILT: RETCLASS=RET, OPMODE=DEVICENO, DEVICENO=180, TILT=40, NW`. The results indicate a successful operation for device 180. Below the results, the command history shows the command `MOD RETTILT` with parameters: RET Class: RET (Remote Electrical TI), Operate Mode: DEVICENO (Operating b), Device No.: 380, and Tilt (0.1degree): 40.

Device No.	Count	Status
182	1	SUCCESS
380	1	SUCCESS
381	1	SUCCESS
382	1	SUCCESS

Command History: `MOD RETTILT`

RET Class: RET (Remote Electrical TI) | Operate Mode: DEVICENO (Operating b)

Device No.: 380 | Tilt (0.1degree): 40

Проверка моторов:

DSP RETSUBUNIT;;

The screenshot shows the web interface of a BTS5900-GL base station. The browser address bar displays the URL: `https://192.168.0.49/platform/frmwork/view/index.html?2020.07.03.13&time=1615383627178`. The interface includes a navigation menu on the left with categories like MML Commands, System Management, Equipment Management, Base Station Maintenance, Board Maintenance, RRU Maintenance, and ALD Maintenance. The main content area shows the execution of the command `WMDSP RETSUBUNIT;;%`, which resulted in the following table:

Display RET Subunit Dynamic Information

Device No.	Device Name	Subunit No.	Subunit Name	Online Status	Actual Tilt(0.1degree)	Actual Sector ID	RET Configuration Data File Name	Configuration Data File
180	CELL_77_21911_1_L18+CELL_77_21911_1_D	1	NULL	AVAILABLE	40	NULL	NULL	NULL
181	CELL_77_21911_2_L18+CELL_77_21911_2_D	1	NULL	AVAILABLE	40	NULL	NULL	NULL
182	CELL_77_21911_3_L18+CELL_77_21911_3_D	1	NULL	AVAILABLE	40	NULL	NULL	NULL
380	CELL_77_21911_1_L18_2+CELL_77_21911_1_D_2	1	NULL	AVAILABLE	40	NULL	NULL	NULL
381	CELL_77_21911_2_L18_2+CELL_77_21911_2_D_2	1	NULL	AVAILABLE	40	NULL	NULL	NULL
382	CELL_77_21911_3_L18_2+CELL_77_21911_3_D_2	1	NULL	AVAILABLE	40	NULL	NULL	NULL

Below the table, there are buttons for `Save Result`, `Download Report`, `Auto Scroll`, and `Clear All (F6)`. At the bottom, there is a `Command History` section with a dropdown menu and a `Command (F5)` input field with `Assst` and `Exec` buttons. The system status bar at the bottom right shows `ENG 17:09`.

# Вывод БС в эфир:

- 2G активируется с контроллера, обычно сразу выходит в эфир, но лучше проверить.

Проверка KCB

STR VSWRTEST;

The screenshot displays the web interface for the BTS5900-GL. The browser address bar shows the URL: `https://192.168.0.49/platform/frmwork/view/index.html?2020.07.03.13&time=1615386300772`. The interface includes a navigation menu with options like MML, Alarm/Event, Batch, Trace, Monitor, Device Maintenance, and Self Test. The main content area shows the 'VSWR Query Result' table, which contains the following data:

BS Name	Sector No.	Cabinet No.	Subrack No.	Slot No.	TX Channel No.	VSWR(0.01)	Test Result
BTS_77_21911_DLN	180	0	180	0	0	110	Successful
BTS_77_21911_DLN	180	0	180	0	1	114	Successful
BTS_77_21911_DLN	181	0	181	0	0	102	Successful
BTS_77_21911_DLN	181	0	181	0	1	109	Successful
BTS_77_21911_DLN	182	0	182	0	0	105	Successful
BTS_77_21911_DLN	182	0	182	0	1	106	Successful

Below the table, there is a section for 'STR VSWRTEST;' with a 'Command History' field containing the command. The 'Command (F5)' field also contains 'STR VSWRTEST'. There are input fields for 'Cabinet No.', 'Test Mode', and 'Txbranch Power Relative Value(0.1dB)'. The interface also shows a 'Navigation Tree' on the left with various maintenance and configuration options.

Проверка секторов:

LST CELL;

The screenshot displays the web interface for the BTS5900-GL system. The browser address bar shows the URL: `https://192.168.0.49/platform/framework/view/index.html?2020.07.03.13&time=1615386300772`. The page title is "BTS5900-GL".

The main content area shows the execution of the "LST CELL;" command. The output includes a success message: "RETCODE = 0 - Operation succeeded." and a table of static parameters for cells.

Local Cell ID	Cell Name	Csg indicator	Uplink cyclic prefix length	Downlink cyclic prefix length	NE-IoT Cell Flag	Coverage Level Type	Freq
11	CELL_77_21911_1_L18	False	Normal	Normal	FALSE	NULL	3
12	CELL_77_21911_2_L18	False	Normal	Normal	FALSE	NULL	3
13	CELL_77_21911_3_L18	False	Normal	Normal	FALSE	NULL	3
211	CELL_77_21911_1_N118	False	Normal	Normal	TRUE	COVERAGE_LEVEL_0:0n&COVERAGE_LEVEL_1:0n&COVERAGE_LEVEL_2:0n	NULL
212	CELL_77_21911_2_N118	False	Normal	Normal	TRUE	COVERAGE_LEVEL_0:0n&COVERAGE_LEVEL_1:0n&COVERAGE_LEVEL_2:0n	NULL
213	CELL_77_21911_3_N118	False	Normal	Normal	TRUE	COVERAGE_LEVEL_0:0n&COVERAGE_LEVEL_1:0n&COVERAGE_LEVEL_2:0n	NULL

Below the table, the command history shows the executed command: "LST CELL;". The "Local Cell ID" field is currently empty.

Запуск секторов:

ACT CELL: LocalCellId=11;

Команда вводится для каждого сектора, LocalCellId узнаем по команде LST CELL (выше)

The screenshot displays the web interface of a BTS5900-GL system. The browser address bar shows the URL: `https://192.168.0.49/platform/framework/view/index.html?2020.07.03.13&time=1615386300772`. The page title is "BTS5900-GL". The user is logged in as "admin" and the system time is "2021-3-10 17:32:34".

The interface features a navigation tree on the left and a main content area. The "Common Maintenance (At+C)" tab is active, showing a table of cell status:

Cell ID	Cell Name	Is Active	Operation	Result	Other Info
211	CELL_77_21911_1_NI18	False	Normal	Normal	TRUE
212	CELL_77_21911_2_NI18	False	Normal	Normal	TRUE
213	CELL_77_21911_3_NI18	False	Normal	Normal	TRUE

Below the table, the command execution history is shown:

```
+++ BTS_77_21911_DLW 2021-03-10 17:32:24
00M #808452097
%%ACT CELL: LocalCellId=11;%%
RETCODE = 0 Operation succeeded.
```

The command history input field contains: `ACT CELL: LocalCellId=11;`. The command history output field shows: `ACT CELL`. The "Local Cell ID" field is set to `11`.

Серийные номера оборудования.



Серийные номера RRU:

команда DSP RRUCHAINPHYTOPO;;

The screenshot shows the web interface for a BTS5900-GL device. The browser address bar shows the URL: `https://192.168.0.49/platform/frmwork/view/index.html?2020.07.03.13&time=1615287616574`. The page title is "BTS5900-GL".

The interface has a top navigation bar with buttons for "MML", "Alarm/Event", "Batch", "Trace", "Monitor", "Device Maintenance", and "Self Test". Below this, there are tabs for "Workspace", "Device Maintenance", "Monitor", "Alarm/Event", and "MML".

The main content area is divided into several sections:

- Navigation Tree:** A tree view on the left side containing various management options like "File Management", "Configuration Rights Management", "Log Management", "Security Management", "Equipment Management", "Base Station Maintenance", and "RRU Maintenance".
- Common Maintenance (Alt+C):** A table showing maintenance records.
- Operation Records (Alt+R):** A table showing operation records.
- Help (Alt+N):** A section for help information.
- Display Device Dynamic Information:** A table showing device details.
- Command History:** A box showing the command "DSP RRUCHAINPHYTOPO;;" and its execution status.
- Extended Information:** A section for additional parameters like "Output Switch" and "SRN(Subrack No.)".

CHAIN	0	0	4	0	0	NULL	NULL	NULL	NULL	NULL
CHAIN	0	0	4	1	0	NULL	NULL	NULL	NULL	NULL

  

Cabinet No.	Subrack No.	Slot No.	Port No.	Sub Port No.	Topo Position	Trunk Level	Standard Capability	Physical device serial No.	Uplink Port No.	Uplink Support No.
0	0	4	0	0	TRUNK	0	GLM_NF	2102311FRDDULB001683	0	NULL
0	0	4	1	0	TRUNK	0	L_NF	2102311FFF10L9000419	0	NULL

  

DSP RRUCHAINPHYTOPO;;
-----------------------

  

Output Switch: OFF(Off)
SRN(Subrack No.): [Parameter Type: Range, Range: (0~1), (60~254)]

Серийный номер VBU:

команда LST ESN::

The screenshot shows a web browser window with the URL `https://192.168.0.49/platform/framework/view/index.html?2020.07.03.13&time=1615386300772`. The page title is "BTS5900-GL". The user is logged in as "admin" and the time is "2021-3-10 17:43:25".

The interface includes a navigation menu on the left with categories like "Application Management", "Equipment Management", and "RRU Maintenance". The "RRU Maintenance" category is expanded, showing various commands such as "Add RRU Chain/Ring(ADD RR)", "Remove RRU Chain/Ring(RM)", "Modify RRU Chain/Ring(MOD)", "List RRU Chain/Ring(LST RRL)", "Display RRU Chain/Ring(DSP)", "Combine RRU Chain/Ring(CM)", "Display RRU Chain/Ring Phys", "Set CPRI Threshold(SET CPF)", "Display CPRI Threshold(DSP)", "Set Frequency Bandwidth(SE)", "List Frequency Bandwidth(LS)", "Add RF Connect Group(ADD)", "Remove RF Connect Group(RM)", "List RF Connect Group(LST F)", "Add RRU/RFU(ADD RRU)", and "Remove RRU/RFU(RMV RRU)".

The main content area shows the execution of the "Query ESN(LST ESN)" command. The output is as follows:

```
--- END
+++ BTS_77_21911_DLN      2021-03-10 17:43:21
O&M #189
%%LST ESN::%%
RETCODE = 0  Operation succeeded.

Query ESN
-----
ESN = 2102312JXC10LA000363
(Number of results = 1)

--- END
```

At the bottom of the interface, there is a "Command History" section with a search box and navigation arrows, and a "Command (F5):" section with an input field and "Assist" and "Exec" buttons. There are also checkboxes for "Save Result", "Download Report", "Auto Scroll", and "Clear All (F6)".