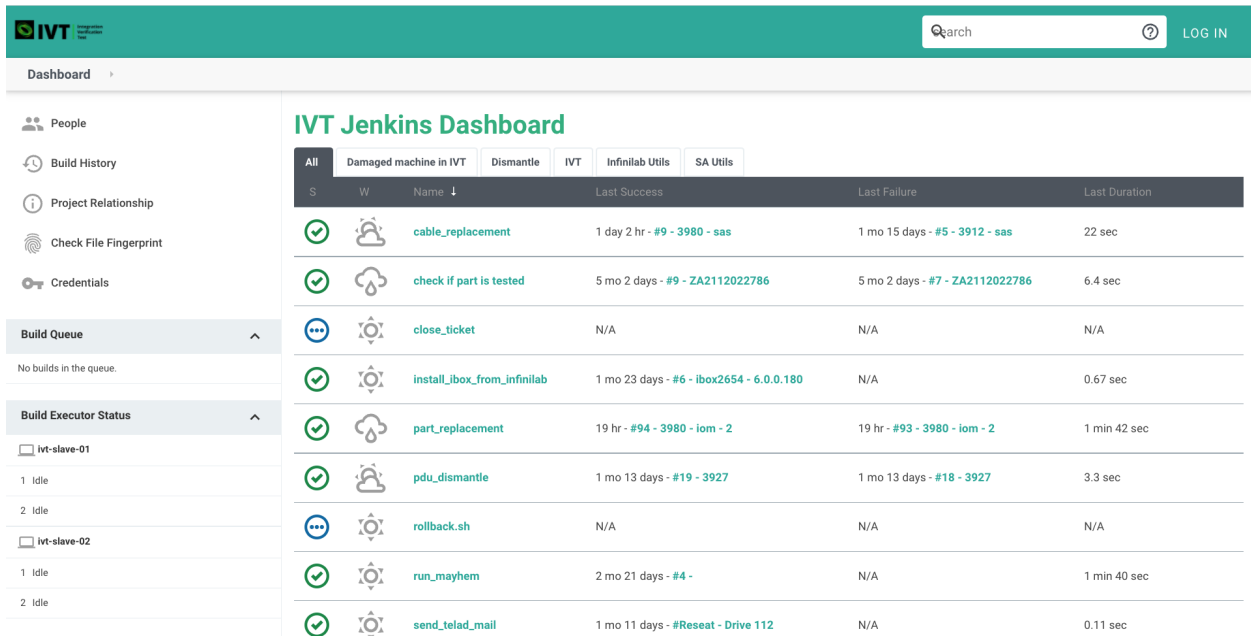


IVT Part Replacement Guidelines

This guide will take you through the usage of 'parts_replacement' script, for automatic log collection and Jira ticket creation when there's a faulty component that needs to be replaced and sent to RMA/Internal Use/FA.

Jenkins

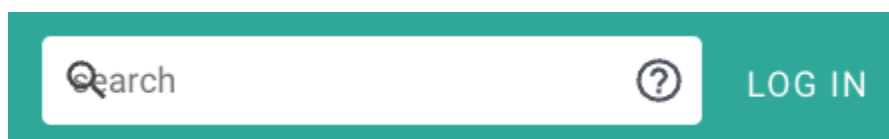
- Go to [IVT Jenkins server](#), this will show you the IVT Jenkins Dashboard, where you can find specific **jobs** to run:



The screenshot shows the IVT Jenkins Dashboard. On the left is a sidebar with navigation links: People, Build History, Project Relationship, Check File Fingerprint, Credentials, Build Queue (No builds in the queue), and Build Executor Status (showing two idle executors: lvt-slave-01 and lvt-slave-02). The main area is titled 'IVT Jenkins Dashboard' and contains a table of jobs. The table has columns for Status (S), Icon (W), Name, Last Success, Last Failure, and Last Duration. The jobs listed are: cable_replacement, check if part is tested, close_ticket, install_ibox_from_infinilab, part_replacement, pdu_dismantle, rollback.sh, run_mayhem, and send_telad_mail.

S	W	Name	Last Success	Last Failure	Last Duration
✓	🔧	cable_replacement	1 day 2 hr - #9 - 3980 - sas	1 mo 15 days - #5 - 3912 - sas	22 sec
✓	🔧	check if part is tested	5 mo 2 days - #9 - ZA2112022786	5 mo 2 days - #7 - ZA2112022786	6.4 sec
...	🔧	close_ticket	N/A	N/A	N/A
✓	🔧	install_ibox_from_infinilab	1 mo 23 days - #6 - ibox2654 - 6.0.0.180	N/A	0.67 sec
✓	🔧	part_replacement	19 hr - #94 - 3980 - lom - 2	19 hr - #93 - 3980 - lom - 2	1 min 42 sec
✓	🔧	pdu_dismantle	1 mo 13 days - #19 - 3927	1 mo 13 days - #18 - 3927	3.3 sec
...	🔧	rollback.sh	N/A	N/A	N/A
✓	🔧	run_mayhem	2 mo 21 days - #4 -	N/A	1 min 40 sec
✓	🔧	send_telad_mail	1 mo 11 days - #Reseat - Drive 112	N/A	0.11 sec

- Press the 'Log In' button on the top right corner



- There you will find a job by the name '[part_replacement](#)'

Project part_replacement

This build requires parameters:

JIRA_PASSWORD
 Concealed

Change Password

Please change the JIRA password to your own

SYSTEM

System serial: NNNNN

COMPONENT

enclosure ▼

Component name

DRIVE_TYPE

None ▼

PART_NUMBER

1 ▼

Component's number in the BOC: up to 2

NODE

None ▼

Node's number in the system, i.e. Node 1

LOCATOR

None ▼

SIMM Locator: A or B, i.e. DIMM A12

SFP_TYPE

None ▼

SIDE

None ▼

ROM/PCM side: a / b

RC

RC-SANMINA03 - Drive bay with no link(s) ▼

...

- **Change your password** to your own! it should be the latest JIRA password

JIRA_PASSWORD

 Concealed

Change Password

Please change the JIRA password to your own

- Fill all the relevant fields:

SYSTEM

System serial - NNNN

COMPONENT

Component name

DRIVE_TYPE**PART_NUMBER**

Component's number in the ibox: ups-2

NODE

Node's number in the system, i.e: Node-1

LOCATOR

DIMM Locator: A or B, i.e : DIMM A12

SFP_TYPE**SIDE**

IOM/PCM side: a / b

RC☐ **NO_LOGS**

Skip log collection

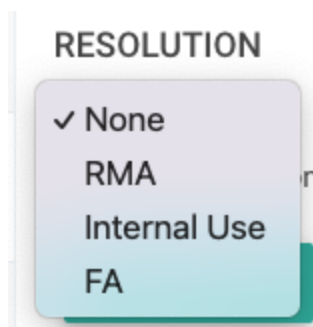
DESCRIPTION

Additional description to add to the JIRA ticket(RC FD included)

RESOLUTION

Choose a resolution for the replacement: Bad component = RMA, old component = Internal Use

- Some fields are automatically chosen, be sure to change them if necessary.
- Any field that is irrelevant for the requested component replacement will send "None"(string) to the script execution
- **RC** provides the matching choices for each component, be sure to change it if necessary.
- **NO_LOGS** will only collect logs(for the relevant component) if the box is **unchecked** as shown above
- **RESOLUTION** is unnecessary and will send "None" if not changed. The 3 options are:



- **DESCRIPTION** is a free text which will be added to the 'Description' field in JIRA
 - It should contain any **Further Description** you need to add besides the **Rejection Criteria** you chose before
 - You can enter a message like this as well: "{noformat} SOME TEXT {noformat}", and it should be added to the JIRA ticket as a code block

When done, press the 'BUILD' button and a job will be created, choose 'Console Output' to watch the result:

- Once the process has finished it should look something like that:

```

name: Enclosure-2 IOM-B,
part_number: 2,
serial: CNE850001ANRA12C,
model: IOM-00004 - IOM,SANMINA,TCA-00340-01-B,05.12.06,
commands: ['DV_LOC=1 /mnt/logs/runx_ivtdash/rund_latest 0 1e0', 'sg_ses -p 0x7 /dev/{} | grep -A 5 Temperature | grep -i iom', 'rund 0 1e0'],
node_number: ,

Collecting logs, this may take a while.
Verifying nodes availability ... OK

Mapping log files ... OK

Total collection: cannot estimate size for enclosures

Do you want to continue with log collection? (y/n):

Collecting logs OK

Collecting Enclosures' logs from node-1 ... OK

Collecting Enclosures' logs from node-2 ... OK

Collecting Enclosures' logs from node-3 ... OK

Creating tar archive files (estimate: 0 sec.) ... OK

Log collection completed, logs in /tmp/ibox-3980-logs-20220529_144935.tar.gz

Logs Collected
Issue Link: https://jira.infinidat.com/browse/IVTS-12627
Model Updated
Rejection Criteria Updated
TAIVT put on hold
New run name is '#94 - 3980 - iom - 2'
Finished: SUCCESS

```

If the job has failed, ask for Mark Entelis(mentelis) to review the failure

Please note that a part replacement requires the relevant servers in the system to be on and mostly active(Nodes, SA), issues with connection might fail the program entirely or fail to fill the JIRA issue as a whole

Replaceable Components

- Enclosure - 1-8
- IOM - 1-8, Side A/B
- PCM - 1-8, Side A/B
- PDU - 1-4
- UPS/BBU - 1,2,3
- SA
- UPS NMC - Same part number as UPS/BBU

- DIMM - Locator A/B(CPU), 1-12
- SFP(FC/Ethernet) - 1-9
- DRIVE(Enclosure Drive, Local Drive, SSD)
- Node - 1,2, 3

MT Replacement

- MT replacements create a "MT" project ticket as they are the ones responsible for node components replacement, which include:
 - DIMM
 - SFP
 - Local Drive
- Yevgeni Smolyar - "yevgenis" will be automatically assigned to the replacement ticket

Manual Way

Inside the **ivt-vm**, type the following to see the script path:

```
mentelis@ivt-vm:[~]$ which partreplace
```

```
partreplace: aliased to python3.6
```

```
~/ivt-project/utils/vm_run/utils/parts_replacement/main.py
```

run the following command from any place inside the vm:

partreplace --help

```
mentelis@ivt-vm:[utils]$ partreplace --help
```

```
[05/30/22 17:26:07] [R-0] [!626]
```

```
usage: main.py [-h] [-s [SIDE]] [--no-logs NOLOGS] [-u USER] [-p PASSWORD]
```

```
                [-f FILE] [-rc REJECTION [REJECTION ...]] [-res RESOLUTION]
```

```
                [-d [DESCRIPTION [DESCRIPTION ...]]] [-l LOCATOR]
```

```

[-st SFP_TYPE] [--node NODE]

[--drive-type [DRIVE_TYPE [DRIVE_TYPE ...]]] [--oty OTY]

ibox component [part_name]

```

positional arguments:

```

ibox                IBOX serial number, Required

component           Component name: enclosure, iom, pcm, pdu, ups, sa,
                    nmc, dimm, sfp, drive, node

part_name           Component's name in the ibox i.e for ups-2 : 2

```

optional arguments:

```

-h, --help          show this help message and exit

-s [SIDE], --side [SIDE]
                    Component's side(a, b)

--no-logs NOLOGS    Don't collect logs

-u USER, --user USER  JIRA user name

-p PASSWORD, --password PASSWORD
                    JIRA user password

-f FILE, --file FILE  mfg_root_id file for servers connection

-rc REJECTION [REJECTION ...], --rejection REJECTION [REJECTION ...]
                    Rejection criteria for the component

-res RESOLUTION, --resolution RESOLUTION
                    Resolution: RMA, Internal Use, FA

-d [DESCRIPTION [DESCRIPTION ...]], --description [DESCRIPTION
[DESCRIPTION ...]]
                    Description, optional

-l LOCATOR, --locator LOCATOR

```

```

DIMM locator: A B

-st SFP_TYPE, --sfp-type SFP_TYPE

SFP type: FC / ETH

--node NODE          Node number

--drive-type [DRIVE_TYPE [DRIVE_TYPE ...]]

Drive type: Enclosure Drive, Local Drive, SSD

--oty OTY           Component/s Older than Two Years

```

Run the command using the following structures, this is the most basic one using **required positional arguments**:

- `partreplace <ibox_sserial=NNNN> <component_name> <component_number>`

You will be required to provide you **Jira** username and password using the -u and -p flags as follows:

- `partreplace -u YOUR_USERNAME -p YOUR_PASSWORD`

If i.e you need to issue a UPS replacement, use the 'ups' component name flag, with its component number(in the system):

- `partreplace NNNN ups 3`

Additionally you can add a description using the "-d" flag, which will accept a string value(description is always optional):

- `partreplace NNNN ups 3 -d "BBU-3 is faulty for whatever reason, needs to be replaced and sent to RMA"`

When replacing an IOM or a PCM, Enclosure flag and number **must be used**, and the relevant component side should be 'a' or 'b'(upper case is not necessary):

- `partreplace NNNN iom 2 -s a`

To replace any drive run the following:

- `partreplace NNNN drive DRIVE_NUMBER -type DRIVE_TYPE`
 - `DRIVE_TYPE = "Enclosure Drive" / "SSD" / "Local Drive"`
 - When replacing a "Local Drive" type, the relevant Node number should be added:
`-node "1" / "2" / "3"`

After running the script or the Jenkins job, logs should be automatically collected and the Jira ticket should look something like this:

IVT

IVT Support / IVTS-9250

IBOX2654: BBU-3 replacement

Edit

Comment

Assign

More

Reject

FA

Internal Use

RMA

Export

Details

Type: **Part Replacement**

Priority: **Minor**

Component/s: **None**

Labels: **None**

Part Model: **BBU - BBU-00001-A - UPS,EATON,5P 1550IR,208-220V,1500KVA + NMC**

Box Serial: **2654**

S/N: **G117H27226**

Rejection Criteria: **BBU**

Executing vendor: **TelAd**

Original Part Location: **BBU-3**

Status: **OPEN**

Resolution: **Unresolved**

Description

Click to add description

Attachments

Drop files to attach, or browse.

ibox:2654-logs-20210823_1

Yesterday

1.78 MB

People

Assignee: **Mark Entelis**

Reporter: **Mark Entelis**

Votes: **0**

Watchers: **0** [Start watching this issue](#)

Dates

Created: **Yesterday**

Updated: **Yesterday**

Agile

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Once a resolution is checked or pressed inside the JIRA, a mail will be sent to the relevant executing vendor to perform the replacement.