

# MCR10195

## Remove the bos partition requirement

### Revision 1.0

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October 13, 2026

## 1 Problem Description

[Ticket #166](#) points out that BOS has been removed from Multics, but traces remain. The one that matters: a cold boot requires a `bos` partition on the RPV. Comment 1 shows the cold boot failing with “init\_partitions: part bos not in label of dsk\_a\_00a”.

### 1.1 Cause

- `init_early_config.pl1` (`bound_temp_1`) builds the early configuration deck with `part` cards for `bos`, `conf`, `log` and `dump`. `init_partitions` then requires every partition named on a `part` card to be in the RPV label.
- `fill_vol_extents.pl1` (`bound_library_1_`), in its default RPV layout, still creates a 270-record `bos` partition, and its end check notes a `bos` partition it never uses.

## 2 Proposed Fix

- `init_early_config`: “`bos`” removed from both `do part = ...` lists, so no `part bos` card is made and a cold boot no longer needs the partition. RPVs that have one are unaffected; it is simply unused.
- `fill_vol_extents`: the default RPV layout no longer creates a `bos` partition (`DEFAULT_RPV_BOS_SIZE_char` removed), so the 270 records go to the paging region. The unused `found.bos` flag and its test are removed. A layout that names a `bos` partition explicitly is still accepted.
- `bos.info` (BCE requests): says that BOS is no longer supported and the request only reports “BOS is not present.” (The request itself, `bce_continue$bce_bos`, already does that when BCE was not booted from BOS, and is left.)

The `compare_ascii` for `init_early_config.pl1` is:

---

```
cpa [lpn init_early_config.pl1] ==
```

```

A213          do part = "bos", "conf", "log";
Changed by B to:
B213          do part = "conf", "log";          /* no "bos": BOS is gone,
          and a part card for it made */
B214          /* init_partitions require
          a bos partition (ticket 166) */

```

```

A233          do part = "bos", "conf", "log", "dump";
Changed by B to:
B234          do part = "conf", "log", "dump";

```

Comparison finished: 2 differences, 5 lines.

---

The compare\_ascii for fill\_vol\_extents\_.pl1 is:

---

```
cpa [lpn fill_vol_extents_.pl1] ==
```

```

A78          DEFAULT_RPV_BOS_SIZE_char
A79          char (3) init ("270"),
Deleted by B, preceding:
B78          DEFAULT_RPV_FILE_SIZE_char

A180         call part_side_door ("bos", "high", DEFAULT_RPV_BOS_SIZE_char);
Deleted by B, preceding:
B178         call part_side_door ("dump", "high", DEFAULT_RPV_DUMP_SIZE_char);

```

```

A193          2 bos          bit (1) aligned,
Deleted by B, preceding:
B190          2 bce          bit (1) aligned,

```

```

A213          else if label.parts (j).part = "bos"
A214          then found.bos = "1"b;
Deleted by B, preceding:
B209          else if label.parts (j).part = "conf"

```

Comparison finished: 4 differences, 6 lines.

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Not changed (they are not about the BOS partition, or are harmless): `test_fnp`'s `bos` (the FNP's own BOS), the `bos` library name in `save_previous_system` and `upd_doc_task_`, comments in `bound_azm_/amu.mc.incl.pl1`, and `disk_rebuild`'s skip of a `bos` partition when copying. `multics_libraries_.gi.info` no longer mentions BOS.

The compare\_ascii for bos.info is:

---

```
cpa >doc>subsystem>bce>bos.info ==
```

```
A1          04/05/85 bos
```

Changed by B to:

B1 :Info: bos: 2026-10-10 bos  
B2

A6 Function: causes BCE to return to BOS, if BCE was booted from BOS.  
A7 BOS may return to BCE with the use of the BOS CONTIN or GO commands.  
A8 This command is valid at all BCE command levels.

Changed by B to:

B7 Function: returned BCE to BOS when BCE had been booted from BOS. BOS  
B8 is no longer supported: Multics is always booted from a BCE tape, so  
B9 this request only prints "BOS is not present."

Comparison finished: 2 differences, 9 lines.

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### 3 Documentation

`bos.info` as above. AM81/AK50 descriptions of the default RPV partitions, if they list `bos`, are out of date; no errata are proposed here.

### 4 Test

1. Cold boot onto an RPV initialized without a `bos` partition: no “part bos not in label” error.
2. Cold boot with the default layout (`init.vol` defaults): the label (`display_disk_label`) has no `bos` partition and the paging region is 270 records larger.
3. Normal and warm boots of an existing system whose RPV has a `bos` partition: unchanged.

### 5 Files Changed

|                                                       |                                                                                       |
|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| <code>bound_temp_1.s.archive</code>                   | <code>init_early_config.pl1</code>                                                    |
| <code>bound_library_1.s.archive</code>                | <code>fill_vol_extents.pl1</code>                                                     |
| <code>&gt;sl1</code>                                  | <code>bound_temp_1</code> , <code>bound_library_1_</code> (hardcore; new system tape) |
| BCE info ( <code>&gt;doc&gt;subsystem&gt;bce</code> ) | <code>bos.info</code>                                                                 |

### 6 Version History

|            |     |                             |
|------------|-----|-----------------------------|
| 2026-10-10 | 1.0 | Initial version of the MCR. |
|------------|-----|-----------------------------|