

Novus OS



1. Novus OS



Novus OS 




1.1 Novus OS



- **.hotpth** 

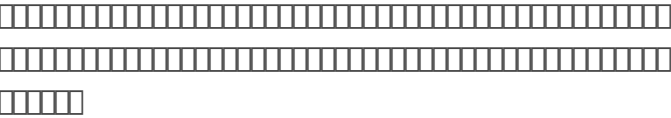

- **.npth**   NKM HAL

- **.apth**   NUC

- **.novu** 

 NUP

1.2 Novus OS



- 1. **level_urgent**
- 2. **level_recommend**
- 3. **level_preview**
- 4. **level_optional**
- 5. **level_dev**

2. Novus OS



2.1



Novus OS



- .npth/.apth/.hotpth
-
-

-

2.2



.hotpth

> .npth

> .apth

>

>

>

Dev

2.3



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-
-
-

2.4

-
-
-

7. Novus OS

[illegible]

packed 4



11

7.1



```
// 00000000
#define NOVUS_UPDATE_HDR_VER_MAJOR 1
#define NOVUS_UPDATE_HDR_VER_MINOR 0

// 0000000000000000
#define NOVU_TYPE_FULL 0 // .novu 000000
#define NOVU_TYPE_SYS_PATCH 1 // .npth 000000
#define NOVU_TYPE_APP_PATCH 2 // .apth 000000
#define NOVU_TYPE_HOT_PATCH 3 // .hotpth 00000000

// 00000000000000000000000000000000
#define UPDATE_LVL_OPTIONAL 0
#define UPDATE_LVL_RECOMMEND 1
#define UPDATE_LVL_PREVIEW 2
#define UPDATE_LVL_URGENT 3
```

```
#define UPDATE_LVL_DEV      4
```

7.2



```
// 0000000000000000
#define NOVU_FULL_MAGIC    0x554E5653  // NVUS → .novu
#define NOVU_NPTH_MAGIC    0x50544853  // PTHS → .npth
#define NOVU_APTH_MAGIC    0x41505448  // APTH → .apth
#define NOVU_HOTPTH_MAGIC  0x484F5450  // H0TP → .hotpth
```

7.3



128Byte



128

magic

file_type

update_level



```
typedef struct __attribute__((packed)) {
    // 0x00 00000000
    uint32_t magic;                // 00000000
    uint16_t ver_major;
    uint16_t ver_minor;

    // 0x08 0000 + 0000
    uint8_t  file_type;            // 0=novu 1=npth 2=apth 3=hotpth
    uint8_t  update_level;        // 0~4 00000000
    uint8_t  remote_support;      // 1=000000 0=00000000
}
```

```

uint8_t reserved_0;

// 0x0C
uint32_t flag_bits;

// 0x10
uint64_t target_os_ver;      //
uint64_t min_compat_ver;    //

// 0x20
uint32_t entry_count;        // /
uint32_t delta_block_count;  // 0

// 0x28
uint32_t meta_offset;        // /Manifest
uint32_t meta_len;
uint32_t table_offset;        // /
uint32_t table_len;
uint32_t data_offset;         // /
uint32_t data_len;
uint32_t snapshot_offset;     //
uint32_t snapshot_len;

// 0x60
uint8_t file_sha256[32];     //

// 0x80
uint32_t sig_offset;
uint32_t sig_len;

// 0x88 ID16ID
uint8_t patch_uuid_bin[8];

// 0x90 128
uint8_t reserved_fill[24];
} novus_update_header_t;

```

7.4 Flag

/

```

bit0  = 1 □□□□□□
bit1  = 1 □□□□□□ / 0 □□□□□□
bit2  = 1 □□□□□□
bit3  = 1 □□□□□□□□□□□□
bit4  = 1 □□□□□□□□□□
bit5  = 1 □□□□□□□□□□/□□
bit6  = 1 □□□□□□□□□
bit7  = 1 □□□□□□□□□□□
bit8~31 □□

```

7.5

[illegible]

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名前	Magic	file_type	更新レベル	コメント
.novu 名前	NVUS	0	1名前	名前 名前
.npth 名前	PTHS	1	1名前	名前 名前
.apth 名前	APTH	2	0名前	名前 名前
.hotpth 名前	HOTP	3	3名前	名前 名前

7.6 16□□□□ UUID □□□□□□□□

16

8 16Hex = 64bit

- 1. SHA256 64bit ID
- 2. patch_uuid_bin[8]
- 3. 16 Hex
- 4. Hex <-> ID

7.7

/

- 1. 128
- 2.
- 3.
- 4. UUID
- 5.
- 6. SHA256
- 7. Ed25519
- 8. update_level

7.8

0

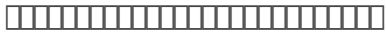
128B → Meta → → → → →



3. Novus OS



3.1



- .hotpth 
- 
- 

3.2



-  3 
- 
- 

3.3



-  ID 
- 
- 

3.4



Novus OS UI



3.4.1

- 


- 


- 


- 



CPU

3.4.2



- [8] [64]
- [8] [64]
"
- [8] [16] UUID[4] SHA256[16] Ed25519
[32]
- [8] [64]
- [8] [64]

- 

- 

- 


3.4.3

-   IO

-  /  
-  / 

-  

3.4.4

- 

-  ID

- 

3.4.5

- **level_urgent**  
- **level_recommend**  
- **level_preview**  
- **level_optional**  
- **level_dev**  

3.5



3.5



Novus OS

- - -



3.5.1



- .apth
- .npth
- .hotpth
- .novu

3.5.2

100%

- 16 UUID
-
- 30 60
-

3.5.3



- 16 UUID
-
-
-
-

3.5.4

1. 16
2. 16
3. 16
4. 16
5. 16
6. 16
7. 16

3.5.5

- .hotpth
-
-

3.5.6

-
-
-

3.5.7

5. Novus OS



Novus OS **100%**

1. +
2. +
3.

6.

-
-
-
-