

## How to Configure Access Codes

### Function:

8.13 firmware introduces a new authentication method, Access Code. There are two ways to manage the codes: Access Code and Access Code Plan. Access Code creation is supported on all management interfaces for single codes. Access Code Plans are created via GUI to generate and print single or multiple codes in one place.

### Creating Access Code:

Same process as adding Profiles which is covered in other documents.

### CLI Example:

```
dmac          - Delete a subscriber profile by MAC address
duser         - Delete a subscriber profile by username
expired       - Delete all expired profiles
fmac          - Find a subscriber profile by MAC address
fuser         - Find a subscriber profile by username
lmac          - List the subscriber database by MAC
luser         - List the subscriber database by username
radhist       - RADIUS Proxy accounting session history
statistics    - Display current number of profiles and connections

Type h to go back, <esc> to abort, ? for help.
-----

Subscribers>add
Enter a subscriber profile into the database.
Enter MAC address :
Enter username    : accesscode101

Select the type of profile:
1 - Device
2 - Group Account
3 - Subscriber
4 - Access Code

Select the type of profile:      [3]: 4
```

**XML Command “ACCESS\_CODE\_ADD”** to add an Access code defined in the online XML DTD.

**SNMP** add to the Authorized Subscriber Table as Access Code (aaaSubType 3) using the fields for Group Account without Password.

## WMI Example:

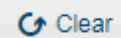
### Process a Subscriber Profile

Page loaded at: THU MAY 09 14:16:43 2019 (AG)

Profile added by Username.

Subscriber  Device  Group Account  Access Code

Account valid until     :  (24-hour clock)

 Clear

DHCP Address Type  Private  Public 

Subnet

Access Code

Expiration Time  hrs  mins

User Definable 1

User Definable 2

Max Upstream Bandwidth  Kbps

Max Downstream Bandwidth  Kbps

Class Name  ▼

QoS Policy  ▼

Confirmation

Maximum Devices

SMTP Redirection  Enabled 

IPv6 Addresses:

## Creating Access Code Plan in GUI:

Go to Subscriber Administration / Access Codes






**Access Codes**

Manage plans for creating guest Internet access codes Page loaded at: FRI MAY 10 15:45:43 2019 (AG time)

Available Plans Edit Plans Reprint

Available Plans

Please allow pop-ups for printing.

 	 		Plan Name	Session Time	Activate By	# Uses	Code Example	BW Upstrm	BW Dnstrm	BW Class	QoS Policy
<input checked="" type="checkbox"/>			DMS test	1 day	2019-05-20 12:20	10	dms-xxxx-xx-enter	2042	5000		

Several controls are on the Available Plans tab:

- **X** - allows deselecting all plans.
- **Pencil** – Allows editing of the selected plan (this will only appear when one plan is selected – if more than one plan is selected, the control will disappear).
- **Printer** - Will generate a single code from each plan that is selected.
- **Page** - Will open up the Add or Edit a plan page (discussed below).
- **Trash Can** - Will delete all plans that are selected at the time.

Select the page icon to create a new plan. **Edit Plans** tab is displayed.

Note: If this is the first plan the other buttons are not displayed.

## Access Codes

Manage plans for creating guest Internet access codes

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Available Plans

Edit Plans

Reprint

### Add or Edit a Plan

Please allow [pop-ups](#) for printing.

Plan Name:	<input type="text" value="DMS test"/>	Access Codes:	<input type="text" value="dms"/> - <input type="text" value="nnnn-nn"/>
Maximum Devices:	<input type="text" value="10"/>	Session Time:	<input type="text" value="0"/> wks/ <input type="text" value="1"/> days/ <input type="text" value="0"/> hrs/ <input type="text" value="0"/> mins
DHCP Type:	<input type="text" value="Private"/>	Activate By:	<input type="text" value="2019-05-09"/> <input type="text" value="12:20 PM"/>
BW Upstream:	<input type="text" value="2042"/> kbps	DHCP Subnet:	<input type="text" value="0.0.0.0"/>
BW Class:	<input type="text"/>	BW Downstream:	<input type="text" value="5000"/> kbps
Batch Print:	<input type="text" value="5"/> 	QoS Policy:	<input type="text"/>

- **The *Activate By*** setting has an effect on created access codes, as well as on a plan itself:
  - For an Access Code *plan*, once the limit set by *Activate By* is reached, the plan is marked as expired – but it remains in the system. No additional codes can be created using this plan until the setting is adjusted to a future time. However, if that is done, then the plan can be used again to create additional codes

*Activate by* requires a login before the configured date and time, even if logged in one minute before *Activate by* the device still gets the full time configured. Can reuse plan by changing *Activate by* date/time.
- **Session Time** based on the first device login. First MAC must login before the *Activate Time* passes will get full session. *Activate By* is reset to allow the full session time.
- The ***Maximum Devices*** value specifies how many different user devices (essentially, MAC addresses) can utilize the same code.

- The **Batch Print** field allows printing of multiple (1-100) codes in a single operation.
- The Access Code **Prefix** and **Suffix** fields allow alpha-numeric characters only (no special characters). The Access Codes drop down box after prefix determines the length of the code.
- All other fields are common to the Subscriber profiles.

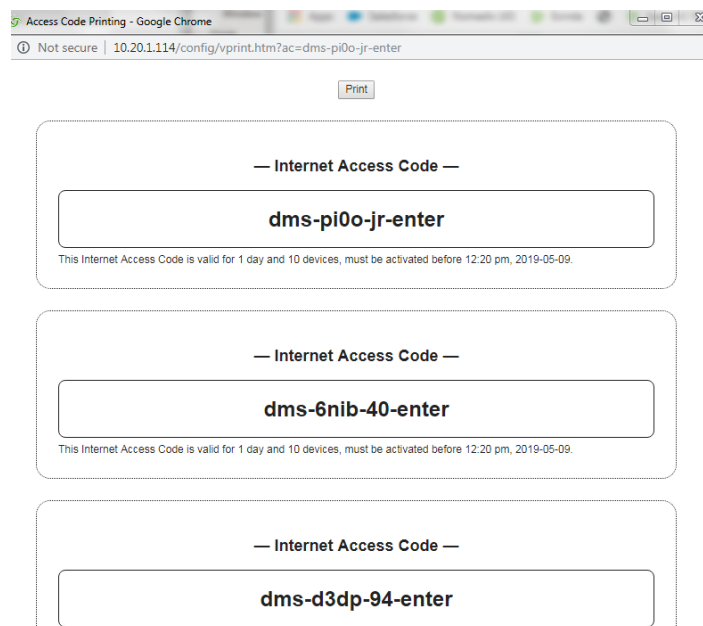
**Add** button creates the plan without printing.

**Restore** button returns the page to factory defaults.

**Create and Print** button generates the Access codes and prints the list.

Requires pop-up to be allowed by the browser.

All other fields/buttons are common to Subscriber Add screens.



**Example of printed codes**

### **Reprint tab**

Reprints existing codes. Only those Access Codes still valid and with remaining logins will be displayed for printing. For instance if an Access Code was configured for 10 devices and there have been 10 logins that code will not display. Access Code having 20 devices and 17 logins the code will still be available for reprint because it can be used 3 times.

**Authorized Subscriber Profiles**

Page loaded at: THU MAY 09 14:53:08 2019 (AG time)

Update 802.1Q Device port value when change is detected:

Subscriber Entries Used: 2 of 7000 licensed. Authorization Profiles: 4 of 16000

[Display options <<<](#)
 Type
  DHCP type
  Subnet
  IP
  IPv6  
 Expiration
  Paid
  Amt Left
  Current Plan
  User1  
 User2
  SMTP Redirection
  Valid Until

Profiles  to 4 of 4

Page  of 1

Type	Username	MAC	DHCP type	Subnet	IP	IPv6	Expiration	Amt Left	Current Plan	User1	Valid Until
Filter	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Access Code	<a href="#">dms-2y30-2o-enter</a>	<a href="#">00:00:00:00:00:00</a>	Private	0.0.0.0	0.0.0.0	::	24 hrs 0 min	0.00	-1		2019-MAY-10 14:51:55
Subscriber	<a href="#">dms-2y30-2o-enter:1</a>	<a href="#">70:5A:B6:A0:D5:31</a>	Private	0.0.0.0	0.0.0.0	::	23 hrs 58 min	0.00	-1		n/a
Access Code	<a href="#">noformathere</a>	<a href="#">00:00:00:00:00:00</a>	Private	0.0.0.0	0.0.0.0	::	24 hrs 0 min	0.00	-1		2019-MAY-12 00:00:00
Device		<a href="#">AA:BB:CC:DD:EE:FF</a>	Private	0.0.0.0	10.10.10.10	::	Unlimited	0.00	-1		n/a

**NOTE:** Subscriber Administration -> List Profiles screen will show the Access code followed by the MAC addresses using that code.

Notice there is a :count after the suffix indicating how many logins have been used.

**Usage:**

Currently supported with the Stand alone Access Code Template (Accesscode.zip found on the Nomadix Support website) utilizing the Nomadix [Local Web Server](#) feature, default internal pages or HTTP login from remote web server utilizing Username field.

With internal pages mixed mode of Username/Password and Access Code authentication Nomadix recommends changing the verbiage of the internal pages. Access Code is accepted as the “Username” without a password. Within Subscriber Interface -> Labels:

Replace Username with Username or Access Code

Replace Password with Password (username authentication only)

Subscriber Administration -> Current table displays the Access Code in the Username field.

### Current Subscribers

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Subscriber Idle Timeout:

Note: doesn't apply to Radius subscribers. Factory default: 1200 s

Subscriber Entries Used: 2 of 7000 licensed. Authorization Profiles: 4 of 16000

[Display options <<<](#)
 IPv6 Addr?
  Room
  User Name
  Bandwidth
  Throughput
  AAA State
  Expiration
  Idle
  Bytes
  Total
  Proxy
  NAT IP
  Class

Entries  to 2 of 2  
 Page  of 1

MAC	IP	Port	Room	User Name	Bandwidth Up / Down	Throughput In-Out Up / In- Out Down	AAA State	Expiration	Idle Timeout	Bytes Sent	Bytes Received
Filter											
<a href="#">70:5A:B6:A0:D5:31</a>	10.0.0.28	0		dms-2y30-2o-enter:1	2042 / 5000	1994-1994 / 209-209	Valid	23 hrs 56 min	20 mins : 0 sec	30922992	9301729
<a href="#">AA:BB:CC:DD:EE:FF</a>	10.10.10.10	10			5120 / 5120	0-0 / 0-0	Valid	Unlimited	none	0	0