

David system startup configuration

Technical documentation

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David system startup configuration : Technical documentation

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Chapter 1. Introduction

1.1. A subject of the document

The document describes an introductory configuration of particular products of David system. A main part of the configuration is done using Web interface. The document was divided into chapters, that describe particular configured applications. Each chapter includes a short description of the problem and practical examples.

1.2. Assumptions

We assume, that the following conditions are fulfilled:

- the products of David system, that was selected by a user, was installed correctly;
- a user is logged in David system portal with user rights of 0 level (it is usually a user `root`);
- a user selects Web applications accessible in `Configuration` tab of David system Web Interface.

1.3. The list of applications described in this document.

Table 1.1. The list of described applications.

The application	David system product
Notification Recipient Configurator	Notification Processor
SNMP Community Configurator	Network Manager
MAC Address Configurator	Notification Processor
IP Address Configurator	Notification Processor
Excluded IP Address Configurator	Network Manager

Chapter 2. Notification Recipient Configurator

2.1. General

Notification Recipient Configurator is a part of **Notification Processor**. It lets you attribute notification recipients to communities, used in the system, on the subject of events, that are processed by the system and described by the community.



Notification Recipient Configurator is one of the applications in Configuration tab. The main view of the application presents a list of the communities. In Community column you should type a community, that was defined by a user in **Netowrok Management Map**. There are two sources, that give rise to the community in the system:

1. in scripts processing messages, that are received by the system,
2. through defining them and attributing a community to particular items managed through **Netowrok Management Map** (i.e. monitored devices, network interfaces, BGP peers).

E-mail column includes e-mail, that is associated with a given community. User level column defines a minimum rights level of a user, that can edit a given entry or delete it. Add/Delete column lets a user add a new entry or delete an existed one. If a user logged in a portal has a 0 level of rights, a last row of the list includes fields allowing to define or add a new entry.

2.2. Examples

2.2.1. Example 1

Assumptions:

Notification Recipient Configurator

1. A system administrator, that has e-mail `admin@domain.com` will be received notifications about cases including community `admin`.
2. A user, that has e-mail `gabriel@domain.com` will be received notifications about cases including community `ups`.
3. Users, that have e-mail `oper@domain.com` will be received notifications about cases including community `oper`.

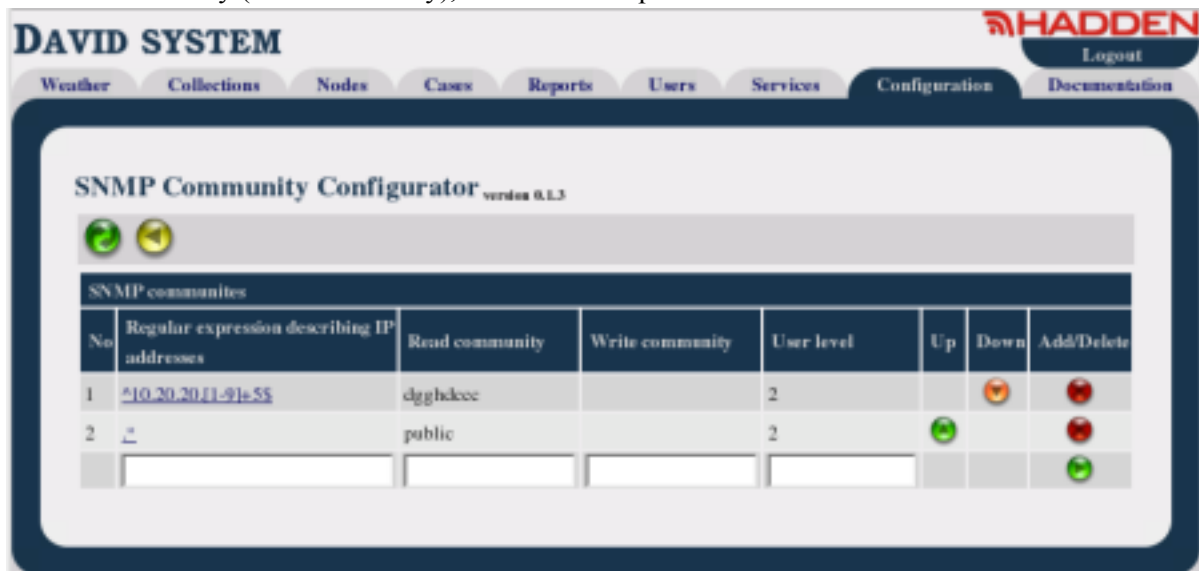
If you want to implement the situation, you should do as follows:

1. In `Community` field you should type the record: `admin`.
2. In `E-mail` field you should type the record: `admin@domain.com`.
3. In `User level` field you should type a user's level, that can edit the record or delete it; i.e. 2.
4. Press `Add` button.
5. In `Community` field you should type the record: `ups`.
6. In `E-mail` field you should type the record: `gabriel@domain.com`.
7. In `User level` field you should type a user's level, that can edit the record or delete it; i.e. 2.
8. Press `Add` button.
9. In `Community` field you should type the record: `oper`.
10. In `E-mail` field you should type the record: `oper@domain.com`.
11. In `User level` field you should type a user's level, that can edit the record or delete it; i.e. 2.
12. Press `Add` button.

Chapter 3. SNMP Community Configurator

3.1. General

SNMP Community Configurator is a part of **Network Manager**. It allows you to configure SNMP Community entries for particular ranges of IP classes, described through regular expressions. Module **dnmmsd** uses a list of the entries that are defined as below. The module browses the list during polling of discovered devices and scanning of a network to discover new devices and it selects the first entry about SNMP Community (read community), that suits for a processed IP address.



A main view of the application presents a list of regular expressions described IP classes. Regular expression describing IP addresses column includes a description of IP class defined as a regular expression. Read community column includes community, that is used to read for a given entry, and Write community column (it is usually empty) includes community, that is used to write. User level column describes a minimum rights level of a user, that can edit a given entry or delete it. Up column includes buttons, that helps a user to move a given entry up, while Down column allows to move it down. Moving of entries is an important function, because processing of the list by [dnmmsd](#) module is interrupted on the first matched entry. Add/Delete column lets a user add a new entry or delete an existed one. If a user logged in a portal has a 0 level of rights, a last row of the list includes fields allowing to define or add a new entry.

3.2. Examples:

3.2.1. Example 1

When you want to define a default SNMP Community to read for all devices in a monitored network, you can write a single entry as follows:

1. In Regular expression describing IP addresses field you should type the following entry: `.*`.
2. In Read community field you should type **community**, that is used in a monitored network.
3. In User level field you should type a user's level, that can edit the record or delete it; i.e. 2.
4. When you want to add a new defined entry you should press **Add** button.

3.2.2. Example 2

Assumptions:

1. Devices of `192.168.100.0/24` class use SNMP Community Roger.
2. Devices of `192.168.200.0/24` class use SNMP Community Jennifer.
3. All, other devices in monitored network use SNMP Community Michael.

If you want to implement the situation, you should do as follows:

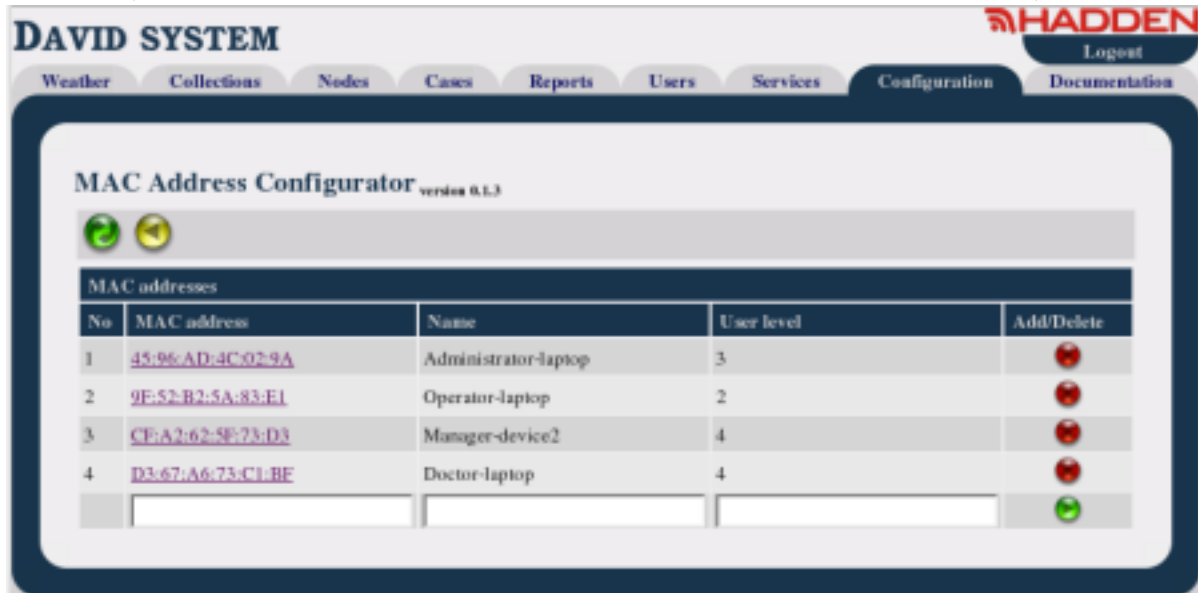
1. In Regular expression describing IP addresses field you should type the record: `^192\.168\.100\..`
2. In Read community field you should type the record: Roger.
3. In User level field you should type a user's level, that can edit the record or delete it; i.e. 2.
4. Press Add button.
5. In Regular expression describing IP addresses field you should type the record: `^192\.168\.200\..`
6. In Read community field you should type the record: Jennifer.
7. In User level field you should type a user's level, that can edit the record or delete it; i.e. 2.
8. Press Add button.
9. In Regular expression describing IP addresses field you should type the record: `.*`.
10. In Read community field you should type the record: Michael.
11. In User level field you should type a user's level, that can edit the record or delete it; i.e. 2.

12. Press Add button.

Chapter 4. MAC Address Configurator

4.1. General

MAC Address Configurator is a part of **Notification Processor**. It allows you to create a list of MAC addresses (MAC addresses of wireless cards for Intel PRO/Wireless LAN Access Point).



MAC Address Configurator is one of the applications in Configuration tab. The main view of the application presents a list of MAC addresses. MAC Address column includes a number of the wireless cards. In Name column you should type a user's card. User level column defines a minimum rights level of a user, that can edit a given entry or delete it. Add/Delete column lets a user add a new entry or delete an existed one. If a user logged in a portal has a 0 level of rights, a last row of the list includes fields allowing to define or add a new entry.

4.2. Examples

4.2.1. Example 1

Assumptions:

1. A wireless card used by Administrator has the address 45:96:AD:4C:02:9A.
2. A wireless card used by a user Matylda has the address 9F:52:B2:5A:83:E1.
3. A wireless card used by a user Jeremy has the address CF:A2:62:5f:73:D3.

MAC Address Configurator

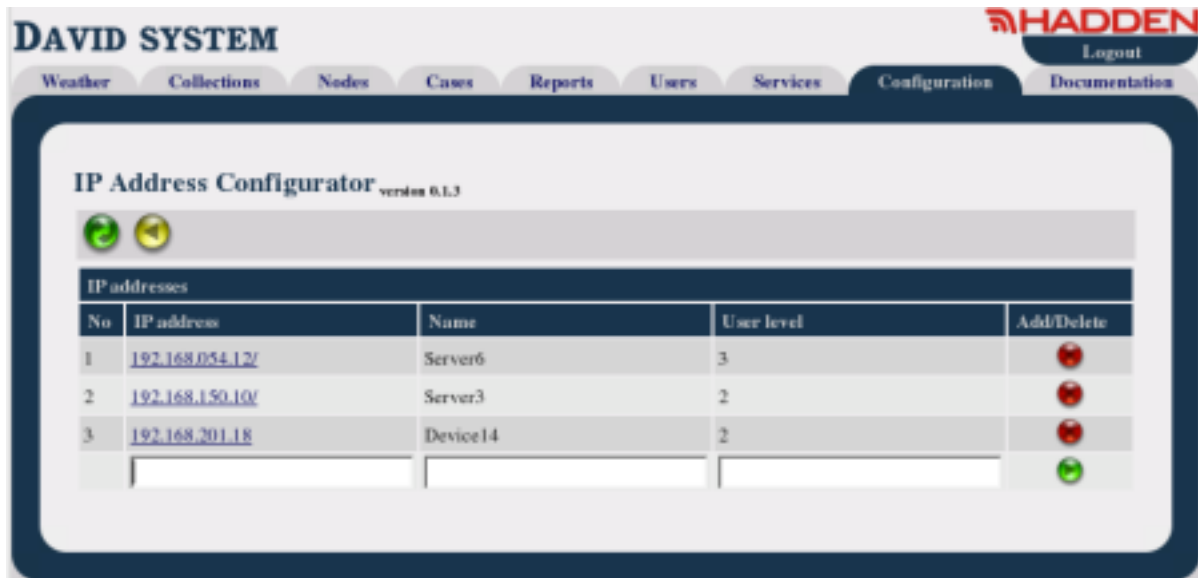
If you want to implement the situation, you should do as follows:

1. In `MAC address` field you should type the address `45:96:AD:4C:02:9A`.
2. In `Name` field you should type the record `Administrator`.
3. In `User level` field you should type a user's level, that can edit the record or delete it; i.e. `2`.
4. Press `Add` button.
5. In `MAC address` field you should type the address `9F:52:B2:5A:83:E1`.
6. In `Name` field you should type the record `Matylda`.
7. In `User level` field you should type a user's level, that can edit the record or delete it; i.e. `2`.
8. Press `Add` button.
9. In `MAC address` field you should type the address `CF:A2:62:5f:73:D3`.
10. In `Name` field you should type the record `Jeremy`.
11. In `User level` field you should type a user's level, that can edit the record or delete it; i.e. `2`.
12. Press `Add` button.

Chapter 5. IP Address Configurator

5.1. General

IP Address Configurator is a part of **Notification Processor**. It allows you to create an address translation table.



IP Address Configurator is one of the applications in **Configuration** tab. The main view presents a list of IP address with their names, identifying a device to which belongs to, corresponded with them. The management system can receive Traps from devices, that aren't monitored actively (they weren't discovered and they don't exist in the database) or the Traps as a sender's IP address have an address, that can't be identified by the system (the system can't find the address on any network interfaces of managed device). In **IP address** column you should type the unidentified address IP, and in **Name** column - a device name, to which the IP address belongs to. **User level** column defines a minimum rights level of a user, that can edit a given entry or delete it. **Add/Delete** column lets a user add a new entry or delete an existed one. If a user logged in a portal has a 0 level of rights, a last row of the list includes fields allowing to define or add a new entry.

5.2. Examples

5.2.1. Example 1

Assumptions:

1. A device `Router1` sends SNMP Trap notifications to a management station, where as a sender's IP address is `192.168.100.15`.

2. A device `UPS1` sends SNMP-Trap notifications to a management station, where as a sender's IP address is `192.168.200.02`.

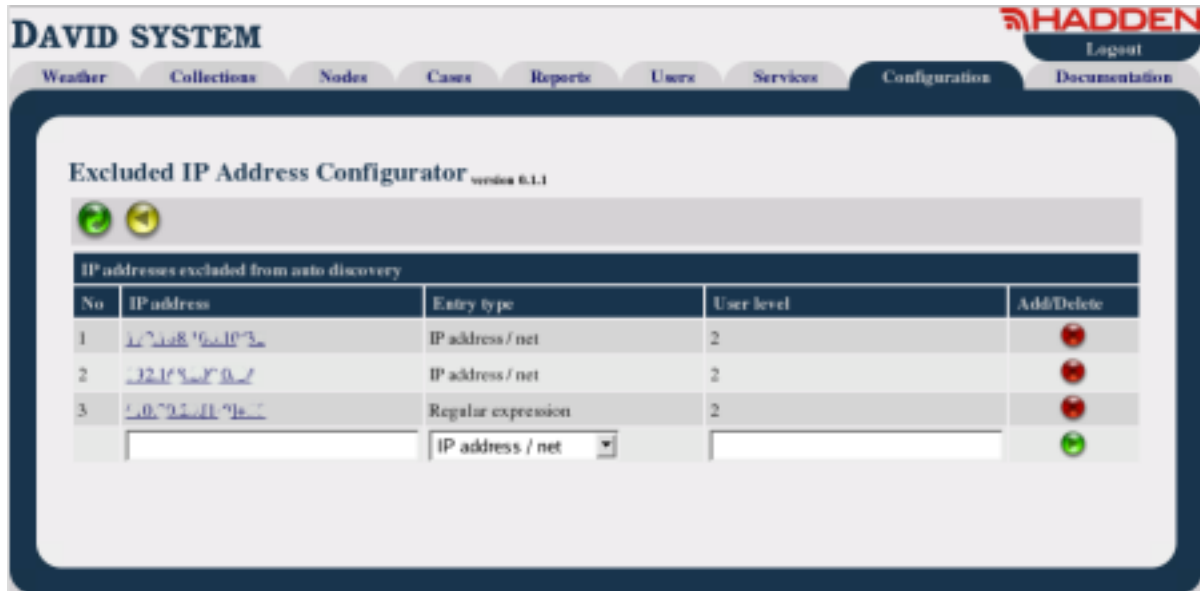
If you want to implement the situation, you should do as follows:

1. In `IP address` filed you should type the IP address `192.168.100.15`.
2. In `Name` filed you should type the record `Router1`.
3. In `User level` field you should type a user's level, that can edit the record or delete it; i.e. `2`.
4. Press `Add` button.
5. In `IP address` filed you should type the IP address `192.168.200.02`.
6. In `Name` filed you should type the record `UPS1`.
7. In `User level` field you should type a user's level, that can edit the record or delete it; i.e. `2`.
8. Press `Add` button.

Chapter 6. Excluded IP Address Configurator

6.1. General

Excluded IP Address Configurator is a part of **Network Manager**. It lets you define IP addresses, that won't be scanned in order to discover new network devices.



Excluded IP Address Configurator is one of the applications in Configuration tab. The main view of the application presents a list of IP addresses. IP address column includes a description of IP classes, that can be defined in two ways: as an IP address/subnet mask or as a regular expression. Entry type column shows a selected definition way of a given entry. User level column defines a minimum rights level of a user, that can edit a given entry or delete it. Add/Delete column lets a user add a new entry or delete an existed one. If a user logged in a portal has a 0 level of rights, a last row of the list includes fields allowing to define or add a new entry.

6.2. Examples

6.2.1. Example 1

Assumptions:

1. We don't monitor devices of 192.168.100.0/24 class.
2. We don't monitor a device of 192.168.150.18 class.
3. We don't monitor devices with the following addresses: 192.168.200.5, 192.168.200.6,

192.168.200.7.

If you want to implement the situation, you should do as follows:

1. In `IP address` field you should type the address `192.168.100.0/24 class`.
2. In `Entry type` field you should select a meaning of typed record `IP address/net`.
3. In `User level` field you should type a user's level, that can edit the record or delete it; i.e. `2`.
4. Press `Add` button.
5. In `IP address` field you should type the address `192.168.150.18/32 class`.
6. In `Entry type` field you should select a meaning of typed record `IP address/net`.
7. In `User level` field you should type a user's level, that can edit the record or delete it; i.e. `2`.
8. Press `Add` button.
9. In `IP address` field you should type the address `^192\.168\.200\.[5-7]$ class`.
10. In `Entry type` field you should select a meaning of typed record `Regular expression`.
11. In `User level` field you should type a user's level, that can edit the record or delete it; i.e. `2`.
12. Press `Add` button.