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**Sieve Notification Using Presence Information
draft-george-sieve-notify-presence-01**

Abstract

This is a further extension to the Sieve mail filtering language Notification extension, defining presence information that may be checked through the `notify_method_capability` feature.

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1. Introduction

Sometimes, it's desirable to tailor Sieve [[RFC5228](#)] notifications to a user's current situation. Presence information provides some information about the user that would be useful to have access to in these cases. The Notification extension [[RFC5435](#)] defines a mechanism to test for presence (the `notify_method_capability` feature), and defines one test for presence (the "online" notification-capability, described in [Section 5 of RFC 5435](#)). This extension specifies testing of a wider variety of presence information.

1.1. Terminology Used in This Document

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [[RFC2119](#)].

2. Testing presence information

This extension uses the "notify_method_capability" test, as defined in the Sieve [[RFC5228](#)] Notify extension [[RFC5435](#)], to test presence information. When a Sieve event occurs (mail arrives) for a user, a Sieve script running on behalf of that user can present the user's presence URI (in the "notification-uri" parameter) and test a specific item of notification presence as defined below (in the "notification-capability" parameter) against one or more values (in the "key-list" parameter).

This document defines the following items of notification presence, which may be specified in the notification-capability parameter:

busy - An indication of whether the user is considered "busy" now (the value "yes") or not (the value "no"). The meaning of "busy" is left to the implementation, and may be a state that's synthesized from other information (including "show", below).

show - The availability status of the user, formally specified. Note that this is similar to the presence element with the same name that's defined in [Section 2.2.2.1 of RFC 3921](#). [[RFC3921](#)] The value of this item is one of the following:

away - The user is temporarily away.

chat - The user is online and actively interested in chatting.

dnd - Do Not Disturb; the user should not be disturbed now.

offline - The user is offline.

xa - The user is away for an extended period (xa = "eXtended Away").

status - A human-readable description of the user's availability status. There is no formal definition for the values this item may take. It is free-form, and may be in any language. Direct comparisons against the value of this field are unlikely to be useful; rather, it is provided to enable extraction of the value into a variable [[RFC5229](#)] for use elsewhere (see example 3 in [Section 3](#)). Note that this is similar to the presence element with the same name that's defined in Section 2.2.2.2 of [RFC 3921](#). [[RFC3921](#)]

The script tests the values of notification presence items in the key-list parameter. The values that each item may have are specified in the list above; in addition, any item may have the value "unknown", if it is not possible to determine the correct value of the item.

There is no capability string associated with this extension, but this requires support for "enotify". [[RFC5435](#)] If the implementation does not support the item being tested, [RFC 5435](#) already specifies that the test must fail without an error.

Although this feature was conceived to assist in notifications, and the test requires support of the Sieve Notify feature, it is only a condition test, and any Sieve action can appear inside it. There are no Sieve actions that conflict with this extension.

3. Examples

1. This example will send a notification only if the recipient is not "busy". If the test for "busy" is not supported, this example WILL NOT send a notification.

```
require ["enotify"];
```

```
if notify_method_capability "xmpp:tim@example.com" "busy" "no"
{
    notify :message "You got mail"
```



```
    "xmpp:tim@example.com?message;subject=SIEVE";  
}
```

2. This example will send a notification only if the recipient is not "busy". If the test for "busy" is not supported, this example WILL send a notification.

```
require ["enotify"];  
  
if not notify_method_capability "xmpp:tim@example.com" "busy" "yes"  
{  
    notify :message "You got mail"  
        "xmpp:tim@example.com?message;subject=SIEVE";  
}
```

3. This example uses the vacation extension [[RFC5230](#)] to generate an autoreply [[I-D.george-sieve-autoreply](#)] if the sender is in the recipient's address book [[I-D.melnikov-sieve-external-lists](#)] and the recipient's presence shows "extended away". The variables extension [[RFC5229](#)] is used to extract the value of the recipient's presence status message, which will be used in the response to the sender. If the test for "show" is not supported, this example WILL NOT send an autoreply.

```
require ["extlists", "vacation", "enotify", "variables"];  
  
if allof (  
    envelope :list "from" "tag:example.com,2009-05-28:mylist",  
    notify_method_capability "xmpp:myjid@example.com" "show" "xa"  
) {  
    # :matches "*" is used here to extract the value  
    if notify_method_capability :matches  
        "xmpp:myjid@example.com" "status" "*" {  
        set "resp_msg" "${1}";  
    } else {  
        set "resp_msg" "I'm away from email for a while."  
    }  
    vacation :handle "ext-away" "${resp_msg}";  
}
```


4. Security Considerations

Security considerations for Sieve [[RFC5228](#)] and the Notify extension [[RFC5435](#)] apply equally here. In addition, implementations MUST ensure that users can not create scripts that access the presence information of others without the proper access controls.

5. IANA Considerations

This registers each presence item as a notification-capability parameter. Future extensions that add new presence items should register those items similarly, using the instructions in [Section 9.3 of RFC 5435](#). [[RFC5435](#)]

To: iana@iana.org
Subject: Registration of a new notification-capability parameter
Capability name: busy
Description: An indication of whether the user is considered "busy" now (the value "yes") or not (the value "no"). The meaning of "busy" is left to the implementation, and may be a state that's synthesized from other information.
Syntax: Has one of the values "yes", "no", or "unknown". The value MUST be in lower case.
Permanent and readily available reference(s): this RFC
Contact information: The Sieve discussion list, <sieve@ietf.org>

To: iana@iana.org
Subject: Registration of a new notification-capability parameter
Capability name: show
Description: The availability status of the user. This is similar to the presence element with the same name that's defined in [Section 2.2.2.1 of RFC 3921](#).
Syntax: Has one of the values "away", "chat", "dnd", "offline", "xa", or "unknown". The value MUST be in lower case.
Permanent and readily available reference(s): this RFC
Contact information: The Sieve discussion list, <sieve@ietf.org>

6. Acknowledgments

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7. References

7.1. Normative References

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