



Presto 2.0

Administrator Guide

Table of Contents

Overview	3
Installation	4
Presto Service	5
How It All Works	6
DNS Configuration	8
Presto Server Console	14
Rules	15
Rule Configuration	17
Rule Conditions	18
Services	25
Editing Services	26
Adding Services	28
Users	31
Printing	31
Preferences	36
Upgrading From Previous Versions	38

Overview

Presto is a new category of enterprise software that brings unprecedented capability to system administrators in delivering network services to mobile users based on location, group membership, tags and other criteria.

Supported Systems:

Server:

Windows:	Vista, 7, 8, Server 2008 R2, Server 2012
Mac:	OS X 10.9+

Client:

iOS:	8.0+
Android:	4.4.2+
Chrome OS:	44+

Installation

- Download and run the Presto Server installer for either Windows or Mac OS X.
- Run the Presto Server Console app. On first launch, you will be prompted for license information. Enter a valid serial number or your account username and password.

Web Proxies

If your site uses web proxy server software, you will need to configure that when licensing Presto Server.

Presto Server supports HTTP/HTTPS and SOCKS5 proxies. To configure your proxy in Presto Server, type in the url of your proxy as follows:

HTTP/HTTPS

http://<IP address of proxy>:<port number of proxy>

SOCKS5

socks://<IP address of proxy>:<port number of proxy>

If your proxy needs authentication, type in the credentials in the proxy configuration screen.

Presto Service

Presto Server runs as a system service/daemon on Windows and Mac OS X. This allows it to service requests even if no one is logged into the machine that Presto Server was installed on.

The system service binds to ports 53 (DNS) and 9631 (HTTP). It can be started and stopped using the following commands:

- Windows

```
C:\> net start "Presto Service"
```

```
C:\> net stop "Presto Service"
```

- Mac

```
bash$ sudo launchctl load /Library/LaunchDaemons/com.collobos.prestod.plist
```

```
base$ sudo launchctl unload /Library/LaunchDaemons/com.collobos.prestod.plist
```

How It All Works

Presto is a set of software that allows system administrators to manage Printer Sharing, AirPlay and Web Sharing for mobile users.

Presto integrates into site DNS to allow mobile devices to discover and make use of network services.

Printer Sharing

Presto integrates into the native printing capability of whatever mobile device it supports.

On iOS, that means that Presto integrates into the AirPrint client software that runs on every iOS device. Extra software is **not required** on an iOS device to enable printing after Presto Server has been installed and configured. Presto does have an iOS app that enables additional functionality for both printing and other services.

On Android, users **must** install the Presto app for Android. The app plugs into the Android printing system, and allows users to print to Presto advertised printers with the native Android print dialog.

On Chrome, users must install the Presto app for Chrome. The app plugs into the Chrome printing system, and allows users to print to Presto advertised printers with the native Chrome print dialog.

AirPlay

AirPlay services require that users install the Presto app for iOS.

Web Sharing

Web Sharing services require that users install the Presto app for iOS or Android. Currently, web sharing services are not implemented on Chrome.

DNS Configuration

Configuring DNS allows mobile devices to discover and make use of network services advertised by Presto Server.

No site DNS (Single Subnet)

In a single subnet environment, no external configuration is necessary. Presto utilizes a hybrid implementation of multicast DNS and unicast DNS to allow Presto Client apps to discover Presto Server automatically.

It is worth noting however that while Presto multicast DNS shares Bonjour's multicast IP address (224.0.0.251), Presto multicast DNS uses port 5335 rather 5353.

Note: multicast must be enabled on the wireless network.

Site DNS

Presto Server uses a combination of one conditional forwarding record, and a series of reverse lookup records to allow iOS devices to discover Presto Server, and to allow Presto Server to determine what network address (subnet) iOS devices are associated with.

The DNS Service Discovery RFC states that:

"The <domain> part of the query name may also be derived a different way, from the host's IP address. The host takes its IP address and calculates the logical AND of that address and its subnet mask, to derive the 'base' address of the subnet (the 'network address' of that subnet, or, equivalently, the IP address of the 'all-zero' host address on that subnet). It then constructs the conventional DNS "reverse mapping" name corresponding to that base address, and uses that as the <domain> part of the name for the queries described

above. For example, if a host has the address 192.168.12.34, with the subnet mask 255.255.0.0, then the 'base' address of the subnet is 192.168.0.0, and to discover the recommended automatic browsing domain(s) for devices on this subnet, the host issues a DNS PTR query for the name "lb._dns-sd._udp.0.0.168.192.in-addr.arpa."

Presto makes use of this feature of DNS Service Discovery to allow Presto Server to determine the subnet address of an iOS device.

Important: You will want to configure subnets in this way for every subnet that you expect to have iOS users. If you don't have iOS users, then you only need to configure the conditional forwarding record.

The rest of this section **assumes** that you have iOS users and want to configure automatic browsing domains for them.

Windows Server DNS

For this example, let's assume Presto Server was installed on a machine with the IP address 10.0.0.3 on 10.0.0.0/24. Let's also assume one other subnet at 10.0.1.0/24.

Open up a command prompt with elevated permissions on your DNS server machine and type the following:

```
C:\> dnscmd . /ZoneAdd presto. /dsforwarder 10.0.0.3
```

```
C:\> dnscmd . /ZoneAdd 0.0.0.10.in-addr.arpa. /DsPrimary
```

```
C:\> dnscmd . /ZoneAdd 0.1.0.10.in-addr.arpa. /DsPrimary
```

```
C:\> dnscmd . /RecordAdd 0.0.0.10.in-addr.arpa b._dns-sd._udp  
PTR 0.0.0.10.dnssd.presto.
```

```
C:\> dnscmd . /RecordAdd 0.0.0.10.in-addr.arpa lb._dns-sd._udp  
PTR 0.0.0.10.dnssd.presto.
```

```
C:\> dnscmd . /RecordAdd 0.1.0.10.in-addr.arpa b._dns-sd._udp
PTR 0.1.0.10.dnssd.presto.
```

```
C:\> dnscmd . /RecordAdd 0.1.0.10.in-addr.arpa lb._dns-sd._udp
PTR 0.1.0.10.dnssd.presto.
```

That's it. Your DNS server has now been configured to allow it to work with Presto.

Note: Presto Server uses multicast DNS service discovery (Bonjour) to discover and advertise Bonjour services on it's local link. For this to work, multicast has to be enabled on the link.

Unbound DNS

For this example, let's assume Presto Server was installed on a machine with the IP address 10.0.0.3 on 10.0.0.0/24. Let's also assume one other subnet at 10.0.1.0/24.

Further, let's assume your domain is "example.com" and name server is "ns.example.com".

Add the following snippet in **service.conf**:

```
server:

    ...

# Create reverse lookup zone for subnet 10.0.0.0

    local-zone: "0.0.0.10.in-addr.arpa." static

# Add NS record

    local-data: "0.0.0.10.in-addr.arpa. 86400 IN NS
ns.example.com."

# Add SOA record
```

```
    local-data: "0.0.0.10.in-addr.arpa. 86400 IN SOA
ns.example.com. hostmaster.example.com. 2008052201 28800 7200 60
4800 86400"
```

```
# Add browse domain PTR record
```

```
    local-data: "b._dns-sd._udp.0.0.0.10.in-addr.arpa PTR
0.1.10.10.dnssd.presto."
```

```
# Add legacy browse domain PTR
```

```
    local-data: "lb._dns-sd._udp.0.0.0.10.in-addr.arpa PTR
0.1.10.10.dnssd.presto."
```

```
# Create reverse lookup zone for 10.0.1.0
```

```
    local-zone: "0.1.0.10.in-addr.arpa." static
```

```
# Add NS record
```

```
    local-data: "0.1.0.10.in-addr.arpa. 86400 IN NS
ns.example.com."
```

```
# Add SOA record
```

```
    local-data: "0.1.0.10.in-addr.arpa. 86400 IN SOA
ns.example.com. hostmaster.example.com. 2008052201 28800 7200 60
4800 86400"
```

```
# Add browse domain PTR record
```

```
    local-data: "b._dns-sd._udp.0.1.0.10.in-addr.arpa PTR
0.2.10.10.dnssd.presto."
```

```
# Add legacy browse domain PTR record
```

```
    local-data: "lb._dns-sd._udp.0.1.0.10.in-addr.arpa PTR
0.2.10.10.dnssd.presto."
```

```
forward-zone:
```

name: presto.
forward-addr: 10.0.0.3

Bind DNS

For this example, let's assume Presto Server was installed on a machine with the IP address 10.0.0.3.

Add the following snippet to named.conf:

```
zone "presto" IN {  
    type forward;  
    forward only;  
    forwarders {  
        10.0.0.3;  
    };  
};
```

Presto Server Console

Presto Server is configured through the Presto Server Console. Presto Server Console has four tabs on the left that control what mode the console is in.

Dashboard

The dashboard provides a quick overview of activity on the network that Presto Server is managing. Gauges show how many rules, services and users are known to the Presto system, as well as performance metrics on Presto's higher level network services.

Rules

Administrators manage all service visibility configuration through the rules tab. You can build up arbitrarily complex rules that control service visibility by editing a series of predicates that describe under what circumstances a particular services is made visible to a particular user.

Services

All services that Presto has either automatically discovered or that the administrator has created are listed in the services tab. Presto Server currently manages Printer Sharing, AirPlay, and Web Sharing services. For each service listed in Presto Server, geolocation and QR codes are automatically created.

Users

Users known to Presto Server are listed in the Users tab. Presto does not query any directory service to get a list of users; rather users are added as they login via the Presto Client app. Presto will then get all the groups associated with each users which can then be used to create rules.

Rules

The Presto Rules facility allows administrators to create policies that control which services will be visible to which users, depending on the properties of the user and the service, and the context in which the user is browsing for services. The Presto Rules Engine (part of the Presto server) enforces those policies whenever a user browses for services.

Presto rules are concerned with two types of objects: **queries** and **services**.

Queries

Whenever a user takes an action that causes Presto to browse for services (for example, opens a printer selection dialog), Presto creates a query object that represents browsing action. The query may contain information about the user's identity, their location (if available), the subnet to which their device is connected, and the type of service being requested. Presto also allows you to create tags (descriptive words or phrases) and associate them with users and user groups. You can assign meaning to a tag by writing rules that allow or prohibit visibility of certain services to users associated with the tag.

Services

Presto maintains a database of services that have been discovered on the network, including the location of the service, and descriptive information that is typically specific to the type of service (for example, printer descriptions include information about the available paper sizes, whether the printer supports duplex printing, and so on). As with users, Presto allows you to assign tag values to specific services, which can then be used in rule conditions to determine visibility.

Matching Queries with Services

Every Presto rule consists of a condition and an action. A Presto rule condition describes a pattern that potentially matches one query and one service. At run time, when a query is created (as the result of a user browsing for services), the Presto rules

engine evaluates all rule conditions that are applicable to that query, in conjunction with all services that are potential responses to the query, on a pairwise basis. Whenever a particular query and service—taken together as a pair—match the condition of a rule, that pair are said to satisfy the rule.

Presto rule actions are simple. There are only two choices—*advertise* and *do not advertise*. When a query / service pair satisfies a rule's condition, and the rule action is *advertise*, then the service may be advertised to the query in question (that is, added to the set of services sent to the user in response to the query). If another rule is satisfied by the same query / service pair, and that rule's actions is *do not advertise*, then that service will not be advertised to the query. The operative phrases in the previous sentences are "may be advertised" and "will not be advertised". Rules that explicitly prevent a service from being advertised to a query take priority over rules that propose advertising the same service to that query.

This is an important concept to consider when writing rules. A rule with the action *advertise* is, in essence, proposing that a service be advertised to a query. A rule with the action *do not advertise* is preventing any such proposals from being accepted as actual advertisements. A service is only advertised to a query if at least one rule proposes the advertisement, and there are no other rules that prevent it.

Rule Configuration

Rules are created and edited in the Rules View of the Presto Server Console. The Rules View is visible when the Rules topic is selected in the leftmost pane of the console (see Figure 1). The Rules View contains the Rule List (the middle pane) and the Rule Editor (the rightmost pane).

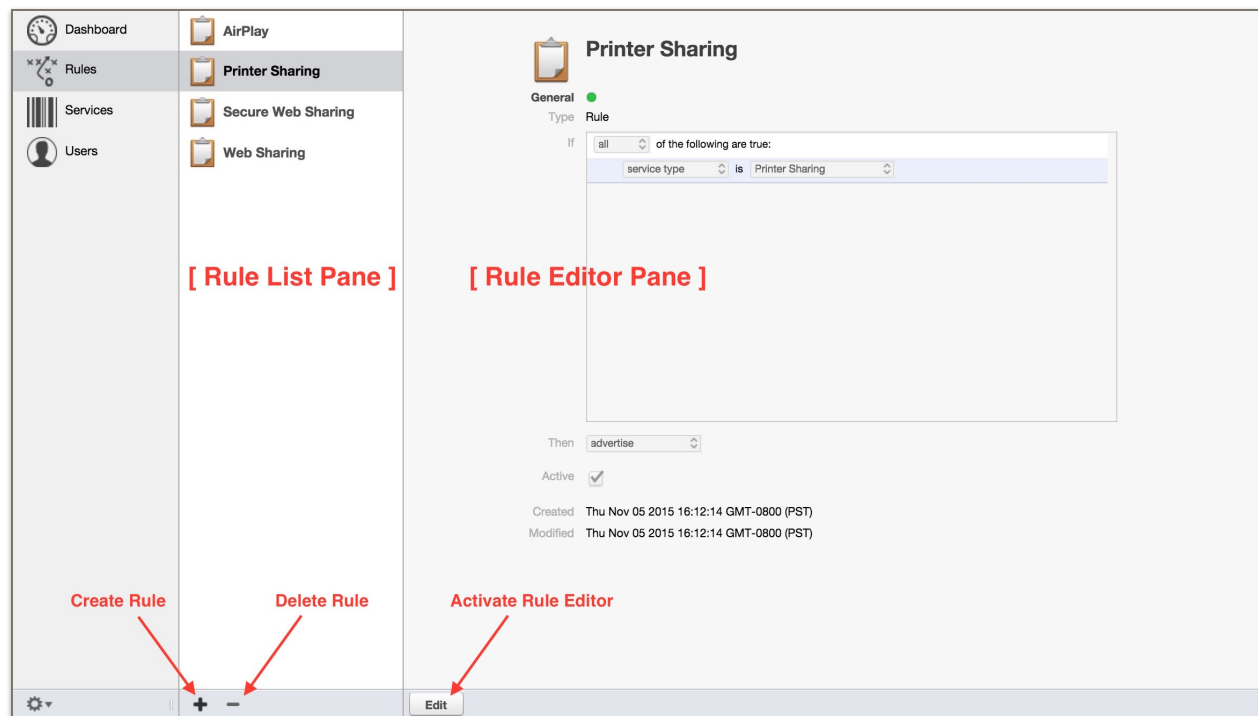


Figure 1. The Rules View.

When a rule name is selected in the Rules List, the corresponding rule is visible in the Rule Editor.

Editing a rule

To edit an existing rule, select the name and activate the Rule Editor by clicking the edit button at the bottom left corner of the Rule Editor pane (see Figure 1). The controls of the rule editor become active, allowing the rule to be re-named and modified. More discussion of the details of rule structure and composition are provided below, in the section entitled Rule Structure.

Creating a rule

To create a new rule, click the plus sign at the bottom edge of the Rule List pane (see Figure 1). A rule is created with the default name “New Rule”, and the editor is opened on the newly-created rule (see Figure 2).

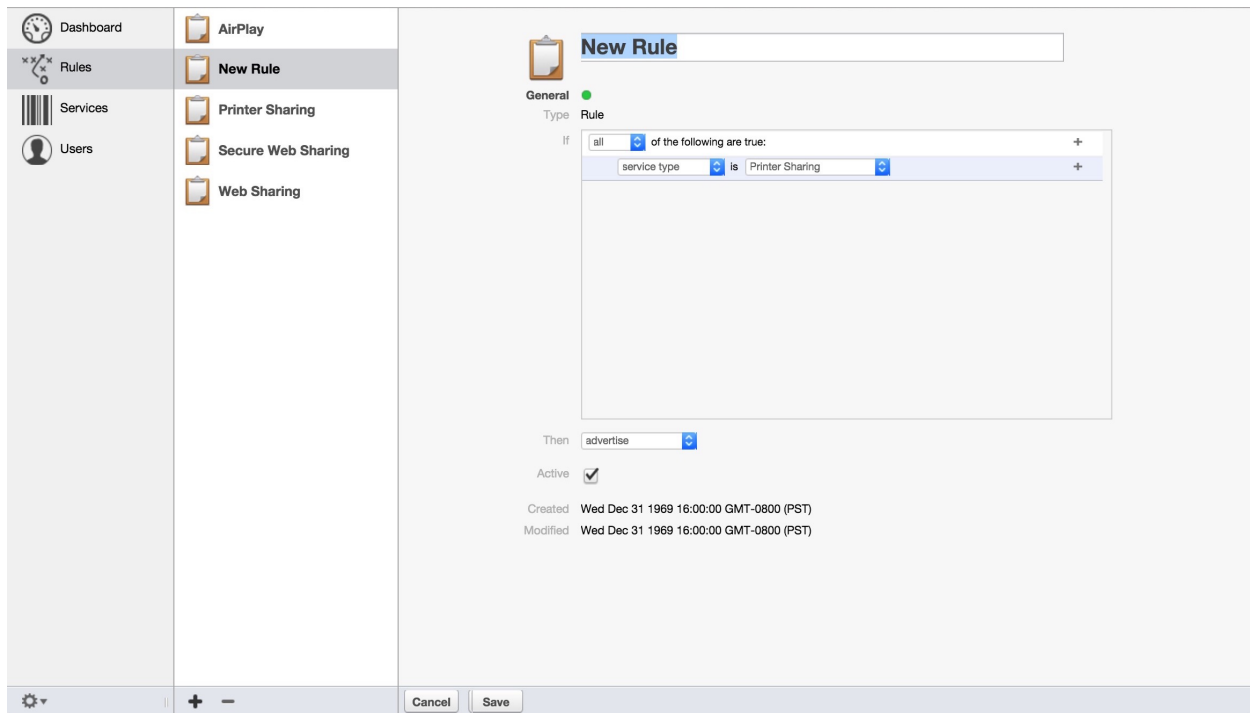


Figure 2. Creating a new rule.

Deleting a rule

To delete a rule, select its name in the Rule List panel and click the minus sign at the bottom of the Rule List panel (see Figure 1).

Rule Conditions

A rule condition consists of a set of or condition elements. A condition element is a statement concerning a query / service pair that is either true or false. Condition elements have two basic forms—simple and compound.

Simple Condition Elements

A simple condition element is single statement that concerns a query, a service, or both, and can either be true or false. The following condition elements are available for composing rules.

Service Type

The service type condition element applies to both the query and the service. All queries represent browses for a particular type of service (such as Printer Sharing, Web Sharing, AirPlay, and so on). Likewise, every service has a specific type. Services can only be advertised to queries of the corresponding type. Every Presto rule must include one (and only one) service type condition element, as the first condition element in the rule. The service type condition element has a pop-up list input field for specifying the particular service type to which the rule pertains. Select a service type from the pop-up list of available service types, as shown in Figure 3.

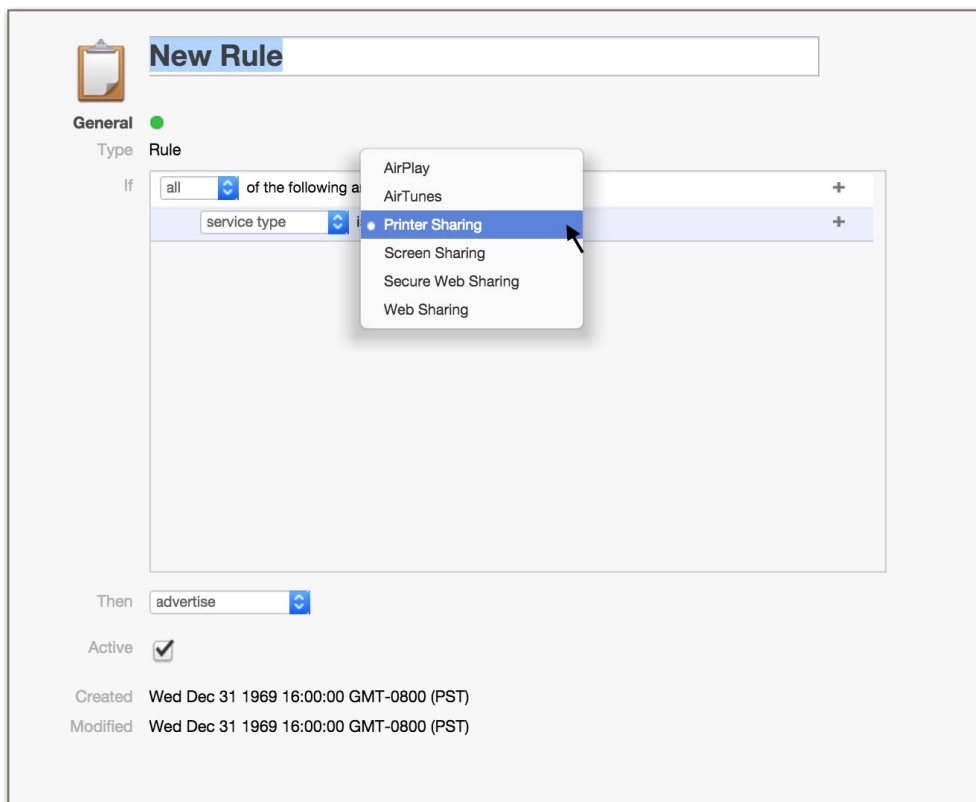


Figure 3. Selecting a service type.

User Tag

User tags are word or phrases that can be assigned to users by an administrator. The user tag condition element specifies that a user must be associated with a particular tag value for the rule to be satisfied. This condition element applies only the the query under consideration for rule matching. Tags are assigned to users on the Users Pane of the Presto Service Console. A tag value can be chosen from the pop-up list of available tags.

User groups are automatically converted into tags and assigned to users as appropriate. User group tags have the following form:

`group:<group_name>`

where `<group_name>` is the name of a group to which the putative user belongs. For example, if the user groups *admin*, *staff*, and *localaccounts* exist on your system, then the tags `group:admin`, `group:staff`, and `group:localaccounts` will be automatically created and assigned to users that belong to those groups, respectively.

User

Presto can only apply rules about user tags for users who are logged in to the Presto app on their devices. Administrators may want to apply different rules to users who are anonymous (not logged in via the Presto app). The user condition element specifies whether the putative user is known (logged in) or an anonymous guest (not logged in). The user condition element has a parameter with two possible values, selected from the pop-up list: *guest* and *not guest*. If *guest* is selected, the condition element is true if the user in question is not logged in. If *not guest* is selected, the condition element is true only if the user in question is logged in.

Note that the user tag condition element (above) implicitly assumes that the user is logged in (that is, not a guest). If a user tag condition element is part of the rule condition, it is not necessary to specify that the user is not a guest, by adding the user condition element. Also note that, if a user tag condition element is specified in a rule,

and the rule also include a user condition element with the *guest* parameter selected, that rule can never be satisfied, and is essentially void.

AirPrint (iOS)

It is important to understand that any query that originates from AirPrint on iOS will **NOT** have any user identity information associated with it.

This means that any rules that reference group membership will not fire for AirPrint queries, as the query will appear as if it came from the *guest* user.

Service Tag

Service tags are identical to user tags, except for the fact that they apply to services instead of users. The service tag condition element specifies that a service must be associated with a particular tag value for the rule to be satisfied. This condition element applies only to the service under consideration for rule matching. Tags are assigned to services on the Services Pane of the Presto Service Console. A tag value can be chosen from the pop-up list of available tags.

Device (proximity)

Presto does its best to determine the locations of services and devices that are making queries, within the limitations of the devices themselves and their environment (please see the section **Presto and Geolocation** for detailed information on how Presto determines location and uses location information). The device condition element can be used to specify that only services in the proximity of a device that is browsing for services will be advertised to that device. The specific distance threshold used to define “in proximity” is fixed at 300 meters. The device condition element doesn’t require any parameter value to be specified.

Service Name

New Rule

General ●

Type Rule

If all of the following are true:

service type	is	Printer Sharing	-	+
service name	matches	BLDG_A_PRINTER_[0-9]+	-	+

Then advertise

Active ☒

Created Wed Dec 31 1969 16:00:00 GMT-0800 (PST)

Modified Wed Dec 31 1969 16:00:00 GMT-0800 (PST)

Presto assigns default names to services. Administrators can, however, override those defaults and assign their own names. In some cases, administrators may choose to assign names that reflect important information about the service (for example, a printer's name might include the building or room in which the printer resides). The service name condition element allows an administrator to exploit such naming conventions for services by specifying a regular expression that must match the name of a service under consideration for the rule to be satisfied. Presto regular expressions support the standard regex syntax defined for JavaScript/ECMAScript.

The particular regular expression to be applied in the condition element is entered in the element's text input field, as shown in Figure 4.

Figure 4. Entering a service name regular expression.

Compound Condition Elements

A compound condition element is a grouping of simple condition elements whose true / false values are combined in one of two ways—*all* or *any*. A compound element of type *all* is true only if all of the elements in the group are true. A compound element of type *any* is true if at least one of the elements in the group is true. Compound condition elements are primarily used to specify multiple user tag or service tag values. For this reason, all of the condition elements nested under a compound condition element must be of the same type, either server tag or user tag.

Rule Validity

Before any rule is saved, it is checked to ensure that the structure of the rule is valid. If the rule is not valid, the rule editor displays an error message explaining the specific problem with the rule structure.

The following constraints must be met by a rule for it to be considered valid:

- Every rule must include exactly one service type condition element.
- Service name and location condition elements may occur at most once in a rule condition.
- Multiple user tag, service tag, or user group condition elements may occur in a rule condition, but they must be nested together in a compound condition element.
- Except for the top-level compound condition element of the rule, compound condition elements may only contain simple condition elements. Compound condition elements may not be contained within compound condition elements.
- All of the condition elements contained in a compound condition element must be the same condition element type.
- If a condition element type occurs at the top level of a rule, another element of the same type may not be contained in a compound element in the same rule.
- If a condition element type is contained within a compound condition element, all occurrences of that type must be contained within the same compound element.

Presto and Geolocation

Presto uses available information about the locations of user devices and services to support location-based logic for determining when a given service should be advertised to a particular user. The availability and accuracy of location information varies widely under different conditions and circumstances. Understanding how Presto obtains and uses location information will help administrators make informed decisions about configuring services and creating Presto rules.

Most mobile devices determine their location with GPS and/or Wifi technology. Under the best of conditions, GPS receivers are typically accurate to within 3 to 15 meters. Accuracy may degrade considerably indoors (depending on the type of structure), or if fewer satellites are simultaneously visible. In some cases, location information for a device may not be available at all.

Services such as printers or AirPlay servers do not typically provide location information. Administrators can assign services to specific locations using the Presto Service Console (see the section Services : Editing Services : Location in this document), simply by dropping a pin on a map.

When location information is not available for a device or a service, Presto uses the location of the subnet that the service or device is connected to. Subnet location can be set by the administrator in Preferences of the Presto Server Console (see Preferences : Location in this document). If the subnet location is not set explicitly, Presto uses web services for IP-based geolocation to determine the subnet location. These are typically much less accurate than device-based location data, often off by several kilometers.

We recommend strongly that administrators do the following to ensure best possible results when using using location-based logic in Presto rules:

- Set the location of the subnet (via the Presto Server Console preferences) to the centroid of services that are connected to that subnet, such as printers or AirPlay services (Apple TVs). If the subnet is hosted on a wireless AP, use the location of that AP as the subnet's location.
- Set the location of fixed service (such as printers) to their actual locations, as closely as possible.

- Recommend that users enable location-based services on their mobile devices and allow the Presto mobile app access to location information at all times.

Services

Presto Server will attempt to discover network services and make those services available to mobile device users. Currently, Presto Server will automatically discover all print queues that are associated with the machine that it is running on. It will also discover any AirPlay devices on the local link on which it is running.

Presto Server also allows manual creation of AirPlay services for those instances in which it doesn't automatically discover the service. Additionally, administrators can create Web Share Services, which will appear on mobile devices as a location based URL.

Attributes

All services in Presto are associated with the following set of attributes:

- **Name**

The name of a service is used to identify the service in the Presto mobile app.

- **Tags**

Tags are used to associate arbitrary properties to a service that can then be used when writing rules.

- **Location**

The location of a service is used to determine where the service is displayed in the Presto mobile app.

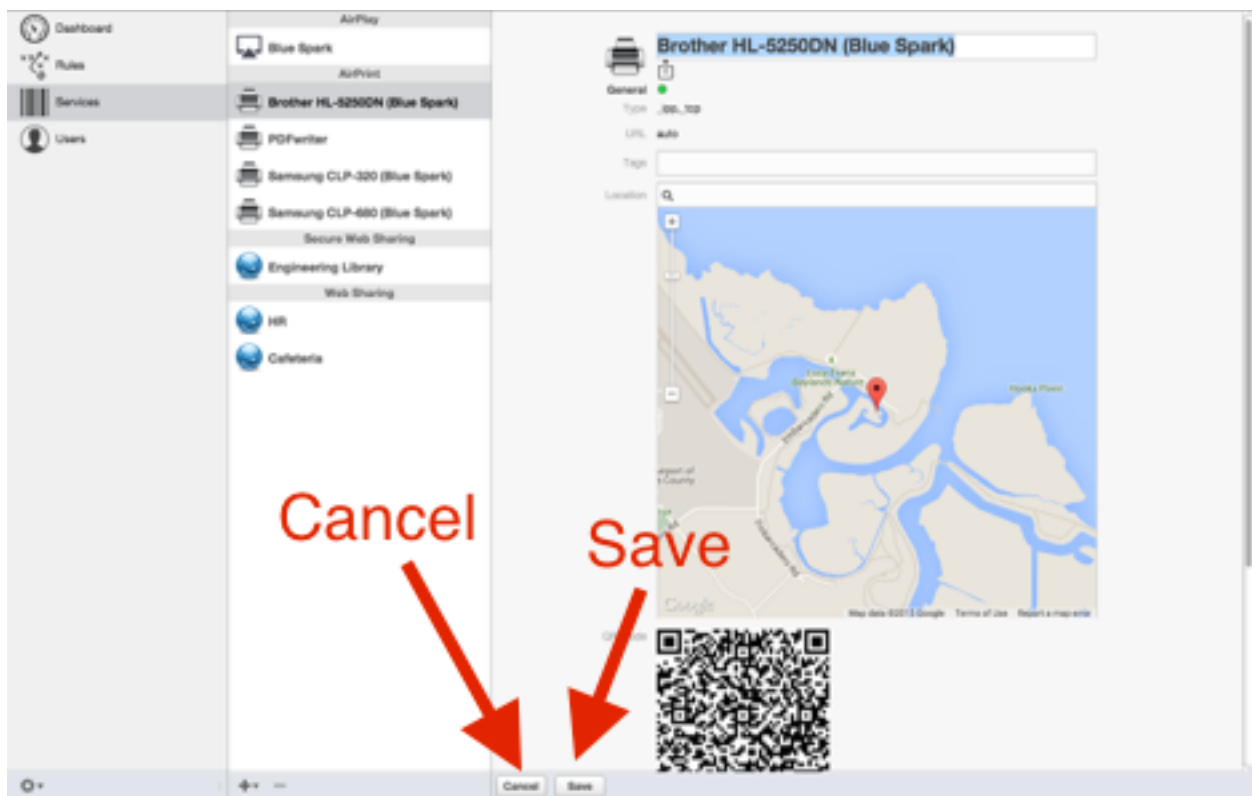
- **QR Code**

The QR code can be printed out and used by the Presto mobile app to access that particular service (assuming the user has rights for the service in question).

Editing Services

Clicking the 'Edit' button puts the service in editing mode, as in Figure 7.

Figure 7. Editing mode for service



Clicking 'Save' will synchronize all changes with Presto Server. Clicking 'Cancel' will cancel the current editing session.

Name

The name of the service can be changed to any valid UTF-8 sequence of characters.

Tags

Tags can be added or removed from a service while in editing mode. Tags are user defined symbolic strings that can be associated with sets of services. Tags are valuable for grouping services that can then be referred when writing rules that dictate service visibility.

Predefined '*service:do not advertise*' tag

Presto supports a predefined tag with the name "service:do not advertise". If you add this tag to any service, that service will not be advertised in response to any browse. This behavior overrides the logic expressed in Presto Rules that would otherwise control whether a service is advertised or not.

Location

Every service in Presto is associated with a specific geographic location. Presto make it's best guess when seeing a service for the first time as to it's location. However, it is almost certainly not exactly where the service is actually located, either physically or virtually. When in editing mode, the pin can be dragged to precisely where you want the service to be displayed in the Presto mobile app.

Editing Multiple Services

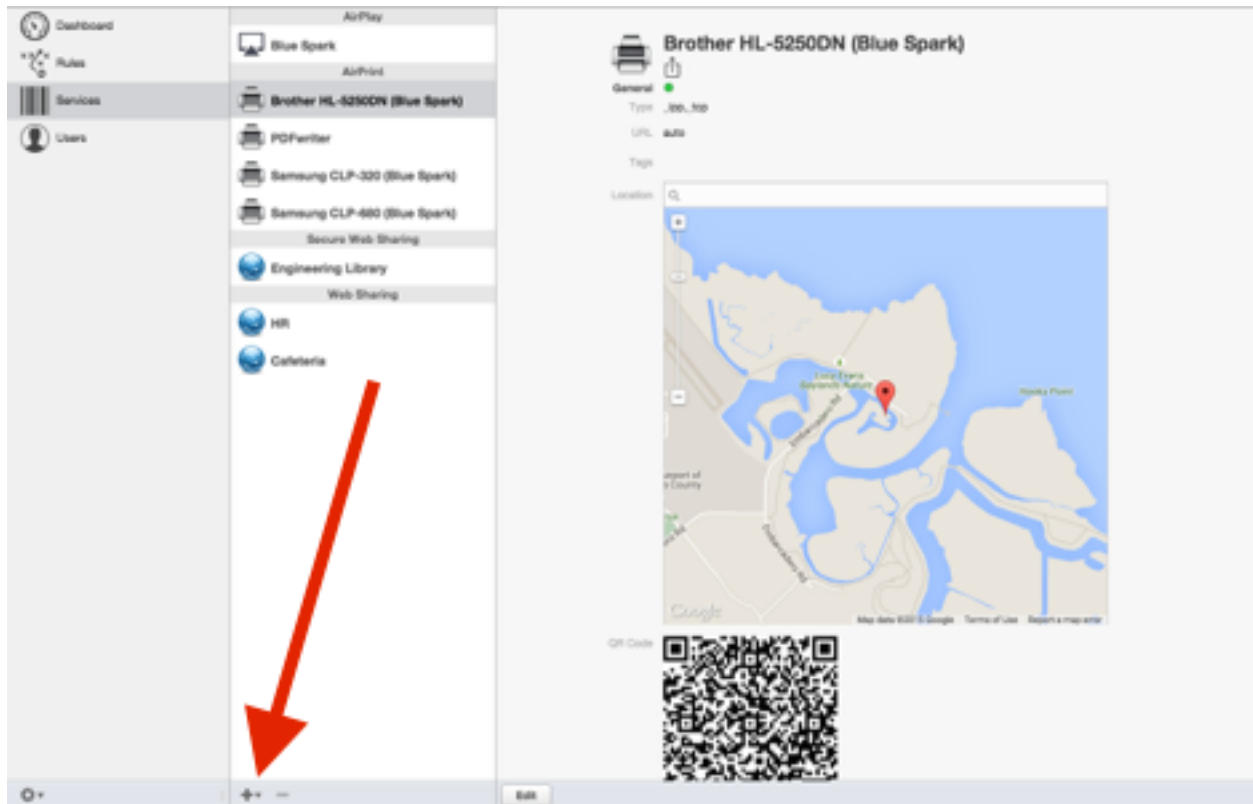
Selecting multiple services in the service list before clicking 'Edit' will cause the editor to go into multiple edit mode.

You will not be able to edit the name of the service, but you can assign one location and a set of tags to multiple services at once.

Adding Services

To add a service, click the '+' button in the Services view as in Figure 5.

Figure 5. Click the '+' button to add a new service.



After clicking the '+' button, Presto Server will allow you to create either a new AirPlay share, a new Web Share, or a Secure Web Share as in Figure 6.

Figure 6. Create a new service selection



AirPlay Share

AirPlay shares can be created manually if Presto is not able to auto discover AirPlay services on your network.

In the URL field of the service, type in the IP address of the AirPlay service. Presto will interrogate the device to discover it's settings automatically.

To make manual creation of AirPlay services work correctly, it is imperative that the IP address of the AirPlay service be configured to be static.

Web Share / Secure Web Share

A Web Share is at it's core a geolocated HTTP(S) URL. This can be extremely useful in campus and corporate environments where end users might not be familiar with the physical environment. For example, in a college campus setting, system administrators might create Web Shares for all the libraries on campus, and geolocate them to be precisely where the libraries are physically located on campus.

Users

Users are added to Presto as they log in to the Presto mobile app. Currently, users are authenticated against whatever directory service is native to the platform Presto Server is running on.

Windows

On Windows, Presto Server will authenticate against either the local domain (machine only) or the domain that the machine is connected to.

Mac

On Mac OS X, Presto Server will authenticate against Open Directory. A complete discussion of Open Directory is beyond the scope of this document, but Open Directory can be configured to participate in an Active Directory environment, in which case Presto Server on the Mac can successfully authenticate users who are using Active Directory credentials.

Limits

Presto is licensed per user. This means that only a certain number of users can be using Presto in a rolling 24 hour period.

The Presto Server Console application can be used to manually remove users who have not been active Presto users for at least 24 hours.

Printing

Presto supports printing from iOS, Android and ChromeOS. We attempt to integrate as seamlessly as we can into the printing workflow of each supported platform.

Direct Printing

Presto will display all printers that the user is allowed to see. The name of the printer will correspond to the name of the service that the system administrator sees in the Presto Server Console.

When the printer is selected, the job will be sent directly to that printer and will not be put in a holding queue.

Magic Queue

Alternatively print jobs can be sent to the *Magic Queue*. The *Magic Queue* is an on-device holding queue for print jobs. After printing to the *Magic Queue*, users can go back into the Presto app and release the job directly to a printer.

iOS

On iOS, Presto installs a share extension that must be used to do Magic Queue printing, as shown in Figure 8. All other printing does not require the use of the Presto app.

Please refer to the [iOS User Guide](#) for more information on how to configure Presto for iOS.

Android

Presto for Android uses a print service plugin to integrate into the native printing experience for Android.

Please refer to the [Android User Guide](#) for more information on how to configure Presto for Android.

ChromeOS

Presto for Chrome uses a print service plugin to integrate into the native printing experience for ChromeOS. After installing Presto for Chrome, and logging into the app, printers that the user is allowed to see will show up when trying to print.

Please refer to the [Chrome User Guide](#) for more specific information on how to configure Presto for Chrome.

Preferences

General

The General pane allow you to modify the logging level. Note that this refers to the logs that are sent to the system log, not the logs that show up on the Presto Server Console display.

Network

The Network pane allows you to specify what IP address(es) you prefer Presto Server bind to when it starts up. This is convenient when you want to run another DNS server on the same machine as Presto Server. This is only possible if the machine has multiple IP addresses to bind to.

After modifying this setting, it is necessary to restart Presto Server to complete the change.

It is also possible to configure any network proxy that might be in use to allow Presto Server to communicate with the Internet.

Location

The Location pane allows you to specify a geolocation for the different subnets on your network.

As devices login to Presto Server, it keeps track of the subnet the devices are on and the location of those devices. This is helpful if a subsequent device wants to see services near the device, but doesn't send helpful location info along with the request. Presto Server can take it's best guess where the device is located based on what subnet it happens to be associated with.

Administrators can tweak the settings of subnet location if another location is deemed more optimal.

Upgrading From Previous Versions

Upgrading from Presto SOHO 1.x

This is a big decision as Presto 2 requires client side software. If you decide to upgrade to Presto 2 your users will have to download and install a client side app on the client device in order to print. Presto will no longer populate printers via the native print UI.

Why You Should Upgrade:

- By upgrading to Presto 2 you will have all the functionality of geolocating all supported services types.
- A single print technology for iOS, Android, and Chrome OS.
- QR Code printing for users
- Location based service discovery for users.

Why You Should Not Upgrade:

- You are happy with how things are.
- You do not want your users to have to download and install client side software.

Upgrading from Presto Enterprise 1.x

We want upgrading to Presto 2 to be the right decision for your environment. Below, we have outlined the issues in upgrading, but every situation is unique. As a service to existing Presto Enterprise customers, we are happy to email or schedule a call to discuss your specific situation.

Why You Should Upgrade:

- By upgrading to Presto 2 you will have all the functionality of geolocating all supported services types and location based service discovery for users.

- A single print technology for iOS, Android, and Chrome OS.
- If you are a Google Apps for Education/Enterprise customer we believe Presto 2 is superior printing technology to Google Cloud Print.
- A robust rules engine that allows administrators never before capability to manage the network services accessible to their mobile users on the network.
- QR Code printing for use.
- Existing Presto 1.X Enterprise customers are automatically upgraded to the Presto “unlimited user” tier.

Why You Should Not Upgrade:

- You are happy with how things are and do not need the new functionality Presto 2 provides.
- You do not want your users to have to download and install client side software.
- You will have to change your DNS configuration settings with Presto 2.
- If you have multiple print servers, you will want to consolidate the printers accessible to your mobile users onto a single print server (we plan to address this in an update to Presto 2 where consolidation of printers will not be necessary). Delaying updating may be the right decision for you.