





PortaSwitch New Features Guide

MAINTENANCE RELEASE 87

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Preface

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يني حر PortaSwitch® Maintenance Release 87 is the next leap-forward release, consistent with our "fast releases, precisely on time" ideology.

Where to get the latest version of this guide

The hard copy of this guide is updated upon major releases only and does not always contain the latest material on enhancements introduced between major releases. The online copy of this guide is always up-to-date and integrates the latest changes to the product. You can access the latest copy of this guide at www.portaone.com/support/documentation/.

Conventions

This publication uses the following conventions:

- Commands and keywords are given in **boldface**.
- Terminal sessions, console screens, or system file names are displayed in fixed width font.

The **exclamation mark** draws your attention to important actions that must be taken for proper configuration.

NOTE: Notes contain additional information to supplement or accentuate important points in the text.

Timesaver means that you can save time by performing the action described here.

Archivist explains how the feature worked in previous releases.

Gear points out that this feature must be enabled on the Configuration server.

Tips provide information that might help you solve a problem.

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Stripe payment processor

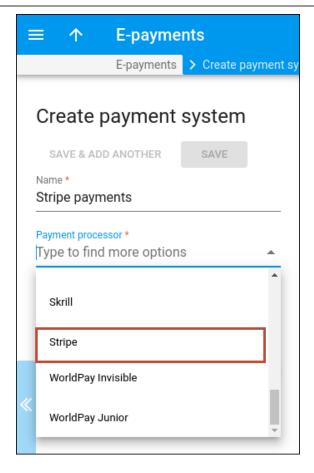
With this new release, the popular payment processing system **Stripe** is now available as a payment processor in PortaBilling®. This new feature allows PortaOne® iPaaS subscribers to select and use Stripe from within the PortaBilling® web interface and receive credit card payments with minimal integration efforts, even if you are running an older version of PortaSwitch®.

Stripe is one of the most widely used payment processing systems in the world and supports over 135 currencies. It provides a simple and transparent fee structure and supports token-based payments. This means that Stripe stores credit card data, so there is no need to pass PCI DSS certification to use Stripe for payments. You can start to accept online payments right away and allow your customers to set up recurring autopayments, too (e.g., automatically pay for invoices).

Starting with MR87, Stripe payment processor is readily available to all PortaOne® iPaaS subscribers and can be activated within a few days (up to 1 week). For MR55–MR86, the entire integration process might take 1-2 weeks because a backport patch for the specific MR needs to be created and applied (in comparison, a full system update might take up to a few months).

The integration patch is safely applied locally within the PortaSwitch® infrastructure to allow the Stripe API to communicate with PortaOne® iPaaS while PortaOne® iPaaS communicates with PortaBilling®. As a result of integration, Stripe appears on the list of payment processors and can be configured and used just like any other payment processor.





Let's see how Stripe payment processor can be integrated in two different scenarios:

Scenario 1. Stripe integration for PortaSwitch® MR86 and earlier

Panda Telecom runs MR70 and requires support for online payments using Stripe. Panda Telecom turns to PortaOne® to request integration and pays the PortaOne® iPaaS subscription fee. The rest of the process looks like this:

- PortaOne® prepares a backport patch for the exact PortaBilling® version used by Panda Telecom (for an additional price).
- The backport patch for Stripe integration is applied within Panda Telecom's PortaSwitch® infrastructure.
- Panda Telecom's PortaSwitch® authorization credentials for iPaaS are set on the Configuration server.

As a result, Stripe appears on the list of payment processors available for Panda Telecom.

Next, Panda Telecom signs a contract with Stripe for a merchant account and receives the Stripe API key. After configuring the Stripe merchant account from within the PortaBilling® web interface, Panda Telecom can use Stripe. The whole integration process takes 1-2 weeks.

Scenario 2. Stripe integration for PortaSwitch® MR87 and later versions

StarlightNet runs MR87 (or later versions) and wants support for online payments with Stripe. StarlightNet already has a contract with Stripe and their API key. In this case, the process is similar but faster (up to 1 week), as there is no need for a backport patch:

- StarlightNet turns to PortaOne® to request integration and pays the PortaOne® iPaaS subscription fee.
- StarlightNet's PortaSwitch® authorization credentials for iPaaS are set on the Configuration server.

As a result, Stripe now appears on the list of payment processors available for StarlightNet. After configuring the Stripe merchant account within the PortaBilling® web interface, StarlightNet can use Stripe.

If you would like to add any other payment processors besides Stripe or other currently available payment processors, this can also be done with the help of PortaOne® iPaaS. Such new integrations take up to several weeks and do not require an update.

For the full list of currently available payment processors that support token-based payments in PortaBilling[®], refer to *Appendix* F of the **PortaBilling**[®] **Administrator Guide**.

Benefits

With this feature, service providers can use the widely popular payment processing system Stripe for regular, token-based, and recurring payments. Thanks to PortaOne® iPaaS cloud-based integration, even customers with older PortaSwitch® versions can use Stripe without needing to perform a full system update. PortaOne® iPaaS subscribers now have the option to add any other payment processors, too.

Service pausing terms

When customers sign up for a commitment, they can opt to pause the service, and thereby stop the charges for a specific period (e.g., when taking a vacation). With this release, you can set the following terms for pausing service:

- Pause fee a fixed fee that applies each time customers pause the service.
- Minimum duration of the pause the minimum number of days for which the customers can pause the service.
- Maximum duration of the pause the maximum number of days for which the customers can pause the service.
- Maximum pauses per year the maximum number of pauses that customers can take to stop the charges per calendar year.

For example, to define the service pausing terms for the IPTV Maxi commitment, the administrator performs the following steps:

- Opens the IPTV Maxi commitment.
- Opens the Pausing terms panel and specifies:
 - \circ Pause fee \$5.
 - Minimum duration of the pause -30 days.
 - Maximum duration of the pause 180 days.
 - Maximum pauses per year -1 pause.

\equiv \uparrow Commitment		SAVE
Commitment "IPTV Maxi"	> Paus	sing terms
IPTV Maxi Currency USD Discount period, billing periods 24		Pausing terms Pause fee, USD 5.00000 Minimum duration of the pause, days 30
Fee for transfer commitment, USD		Maximum duration of the pause, days 180
Description		Maximum pauses per year 1
One-time fees	>	
Recurring fees	>	
Pausing terms	>	

Let's say Mary Smith takes a vacation and, on August 15, calls a customer service representative (CSR) to pause her IPTV Maxi commitment for 1 month: September (30 days). To pause the service, the CSR:

- opens Mary Smith's account;
- selects the IPTV Maxi commitment;
- clicks the Pause option; and
- checks whether Mary is allowed to pause the service (the web interface displays the number of pauses left this year).

After making sure that Mary Smith is eligible for a service pause, the CSR informs Mary that she will be charged a \$5 pause fee and sets the pause dates for August 31–September 30. On September 1st, Mary receives her invoice and sees the \$20 total for August: the \$5 pause fee and the \$15 recurring fee.



Account '12060255543' > C	ommitments > IPTV Maxi			
12060255543	Commitments			
Incount role Phone line Vape	IPTV Maxi	Discount period 2020-08-22 - 2022-08-22		matically extend the more billing periods
Credit		FEES	PAUSE	TERMINATION
Customer Mary Smith CE		Pause fee, USD	Pauses left this year	
Main product * Smart call * @		5	1	
Balance control		Pause the commitment for a perio	bd	
Subordinate		Start date	End date *	
(DRs >		Aug. 31 2020	8 the 2020-09-30 Sep. 30 2020	D 🐔
Personal info			Sep. 30 2020	
Finances		Pause period, days 30		
Subscriptions >				
Add-on products >				

In November, Mary Smith calls the CSR again to pause her IPTV Maxi commitment for another month. Since Mary Smith has already used up her service pauses limit for this year (1 pause), the CSR informs Mary that it's impossible to pause her service again.

This feature helps administrators define the service pausing conditions for a particular commitment in one place.

Other features and enhancements

• Improved Redundant LDAP servers for the Microsoft Active Directory – the Microsoft Active Directory (AD) is a directory service that enables service providers to manage all their users within their infrastructure from a single place. An AD administrator can create user records in AD to manage access to PortaBilling® and the Configuration server web interface.

The LDAP server is used to authenticate AD users in PortaBilling[®] and to synchronize data between the AD and PortaBilling[®].

With this release, you can specify multiple LDAP server addresses to provide redundancy. Thus, if the first LDAP server is down for some reason, the other server is used for AD user authentication. This ensures that AD users can access PortaBilling® or the Configuration server web interface without interruptions.

For example, David, an AD user, logs in to the PortaBilling® web interface using his LDAP credentials. PortaBilling® sends an authentication request to the AD via the LDAP. The first LDAP server (1.1.1.1) is unavailable, thus, the system connects to the second LDAP server (2.2.2.2). The AD verifies the user login and the LDAP password. David can now access the PortaBilling® web interface.

This enhancement provides AD users with stable access to the PortaBilling® and Configuration server web interfaces.

Configuration

To add a redundant LDAP server address, go to the Configuration server and perform the following steps.

Add the redundant LDAP server address to enable access to the Configuration server web interface.

- 1. On the **Configurations** tab, clone the existing configuration.
- 2. In the **Configuration Tree**, select **PortaSwitch**®.
- 3. In the **Groups** panel, select the **ConfiguratorAuth** group.
- 4. In the **LDAP_Address** option, click **Add** to specify one or more redundant LDAP server addresses.

Configuration 1597812241-rev.5' information X				
🕞 Clone 📲 Save 📝 Verify 🥳 Change Monitor Thresholds	Compare network configurations Search:			
PortaSwitch Configuration PortaMonitor Configuration				
Configuration Tree + -	ronments Groups			
PortaSwitch	🛞 Global 🔫 — — 💫	BilingFeatures	*	
⊕ ۞ Auxiliaries	a pb	A Cassandra		
B 🚳 CallRecording	TechWritingEnv old	Im ConfiguratorAPI		
🗃 🏐 ClusterSuite	(a) performance	🌧 ConfiguratorAuth <table-cell-rows> — — 🔀</table-cell-rows>		
- (i) Configurator	Dmega_old	DatabaseServer		
a () BilingEngine	alle aston	DbMySQLClient	-	
a 🕲 DB a 🕲 LogServer	PortaSwitch/G:ConfiguratorAuth			
B G Logserver	LDAP_Address	1		
	2.22	2		
	LDAP BlockedUserCode	-4	00	
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	LDAP_connectionRequest integet			
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	LDAP_FieldEmail			
	OLAP_FieldExpirationDate accountExpires outExpires divenName			
		wane		
	LDAP_FieldLastname Sn LDAP_FieldLogin (n)			
		2		
	OLDAP_FieldRole Root	1		
	LDAP_SearchUserLogin Cn=u	iser123,ou=Users,dc=companyName,dc=com	•	
Task monitor			*	

Add the redundant LDAP server address to enable access to the PortaBilling® web interface.

- 1. On the **Configurations** tab, clone the existing configuration.
- In the Configuration Tree, select ClusterSuite > Web_Cluster.
- 3. In the **Groups** panel, select the **WebAuth** group.
- 4. In the **LDAP_Address** option, click **Add** I to specify one or more redundant LDAP server addresses.



Servers Sites Configurations 4 Environments	Users Update 😔		🔝 - demo -
🕞 Create 🔚 Clone 📑 Delete 🔄 Compare			
Configuration '1598157740-rev.2' information			×
😭 Clone 📲 Save 📝 Verify 📝 Change Monitor Thresholds	Compare network configurations	Search:	
PortaSwitch Configuration PortaMonitor Configuration			
Configuration Tree +	Environments	Groups	
Create cluster		VoiceFraudProtection	
OP PortaSwitch	i pb	ji Web	
Auxiliaries	TechWritingEnv old	iii WebAnalytics	
CalRecording	(a) performance	🐘 WebAuth 	
🗃 🏐 ClusterSuite	Drega_old	# WebCustom	
- (i) Diameter Cluster Front-end	and aston	- Worker	-
Gimer Cluster	/PortaSwitch/ClusterSuite/Web Cluster/G:WebAuth		
B PortaSIP Cluster	B • LDAP_Address	1111	3001
Web Cluster web-cluster-1	4-	2222	
web-cluster-1 web-cluster-2	LDAP BlockedUserCode	2.2.2.2	
- Configurator			
BillingEngine	EDAP_ConnectionRequestTimeout EDAP FieldBlocked	10	
a 🗊 DB	LDAP_HeidBlocked LDAP FieldCompanyname		
B () LogServer			
() RT		countryCode	
	LDAP_FieldEmail	mail	
	LDAP_FieldExpirationDate	accountExpires	
	LDAP_FieldFirstname	givenName	
	LDAP_FieldIEnv	pbEnv	2
	CDAP_FieldLastname	sn	
	LDAP_FieldLogin	uid	۰ د
Task monitor			*

Once the configuration is applied, the system automatically uses the second LDAP address as a backup when the first address is unavailable.

• Automatically extend the commitment discount period – with the commitments feature, service providers can offer services at discounts for set periods of time (from one year to several years). By default, when their discount ends, customers start to pay the full recurring fee to continue to use the service. With this release, you can choose whether to automatically start another period of commitment and prolong the discount.

Let's say John Doe has been using the Turbo 1 GB package for 23 months. The discount on his 24-month commitment ends in a month so the customer service representative (CSR) calls John and offers to extend the Turbo 1 GB package for another 24 months. John agrees, since he thinks that's a great idea.

To extend the discount period, the administrator:

- o Opens John Doe's account;
- Opens the Turbo 1 GB commitment; and
- Turns on the **Automatically extend the discount** feature.



$\equiv \uparrow$ Account	SAVE CHANGES			
Account "44012235214" > Com	nitments > Turbo 1 GB			
Add12235214 Account role Phone line Type	Commitments ADD Turbo 1 GB	Turbo 1 GB GD RENEW COMMITMENT Discount period 2020-08-20 - 2022-08-19		, automatically extend the
Credit		FEES	PAUSE	TERMINATION
Customer GD Main product * SIP Subscribers * GD Balance control Subportinate		Recurring fees Subscription Turbo 1 GB	Add-on product Turbo 1 GB	Recurring discount, USD 5
xDRs >		🎬 Time-limited upgrade 🤇	•	
Personal info V		One-time fees		
Finances ^		Charge description Service	Fee. USD	Discount, USD
Subscriptions >			s / Adjustments 10	5
Add-on products >				
Commitments >				
E-payments >				

This enhancement helps the administrator to extend the discount period in commitments with a single click.

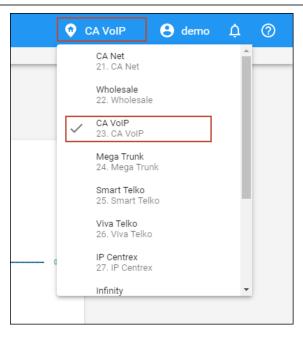
Web interface changes

• The environment numbers are now displayed in the PortaBilling® administrator web interface along with environment names and descriptions. Thus, administrators and CSP's technical specialists can navigate among the environments using environment numbers.

For example, when working with call logs or a database, technical specialists can only identify the environments by numbers (i_env value). Now, with the environment number, they can find it on the web interface faster. To do this, they need to open the list of environments, look up the specific number within the consecutive range, and switch to that environment.

When administrators send requests for a check-up and/or troubleshooting to technical specialists, they can refer to environment numbers in their queries, too.





This enhancement allows administrators and technical specialists to identify environments by numbers, hence making it faster to find a specific environment.