

# Configuring Bandwidth Usage Billing

Bandwidth Billing monitors and bills your clients for the bandwidth they use. You can also include a bandwidth usage graph and chart on your client's invoice.

Bandwidth billing is a child service attached to an existing, renewing service, for example, the base parent service is the standard monthly fee for a dedicated server. You would enable the bandwidth billing service module on that service's service plan and then configure the various custom fields for it. When the parent service renews the first time, it adds the bandwidth overage child service and sets it to be the dollar value of whatever the overage was for the month that just ended.

Going forward, each time the parent service renews, the bandwidth billing service module update the child service accordingly. Your client will receive an invoice each month for the amount due for the parent service for the new month and the overage for the month that just ended.

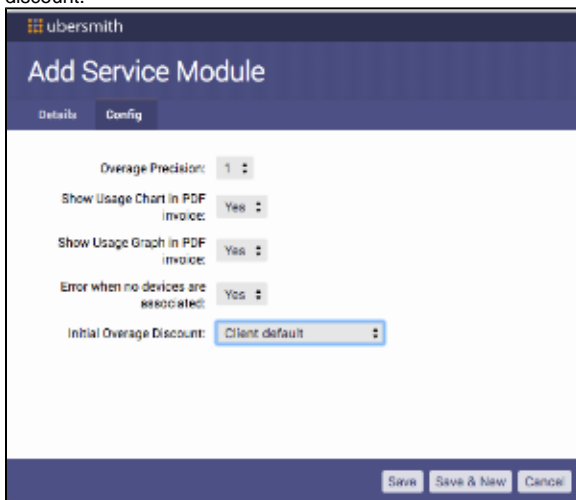
In order to begin billing for this service, you need to configure Ubersmith. Once all the necessary pieces have been configured, any current or new service based on the service plan will be ready. The configuration steps are as follows:

1. [Associate the bandwidth usage billing service plan to another appropriate service.](#)
2. [Configure the Bandwidth Monitoring and Switch Information device modules.](#)
3. [Add the \*\*Bandwidth Billing\*\* service module to your service plan.](#)
4. Configure the service module (below).
5. [Create a bandwidth usage billing service.](#)
6. Configure the service plan with the service module fields (below).
7. [Associate your device to your service.](#)

## Configuring the Service Module

The Bandwidth Billing service module monitors and bills your clients for the bandwidth they use. You can also include a bandwidth usage graph and chart on your client's invoice.

1. In the **Overage Precision** field, select 0, 1, or 2 to determine how many decimal places to round the amount of bandwidth used.
2. In the **Show Usage Chart in PDF invoice** field, select Yes or No.
3. In the **Show Usage Graph in PDF invoice** field, select Yes or No.
4. In the **Error when no devices are associated** field, select **Yes** to receive notification if there is no device to track your client's backups. Select **No** to continue renewing services even if there is no associated device.
5. In the **Initial Overage Discount** field, select No Discount, Client default, or Parent service discount.



The screenshot shows the 'Add Service Module' interface in the Ubersmith application. The title bar says 'ubersmith' and the main heading is 'Add Service Module'. There are two tabs: 'Details' and 'Config', with 'Config' being the active tab. The configuration fields are as follows:

- Overage Precision:** A dropdown menu set to '1'.
- Show Usage Chart in PDF invoice:** A dropdown menu set to 'Yes'.
- Show Usage Graph in PDF invoice:** A dropdown menu set to 'Yes'.
- Error when no devices are associated:** A dropdown menu set to 'Yes'.
- Initial Overage Discount:** A dropdown menu set to 'Client default'.

At the bottom of the form are three buttons: 'Save', 'Save & New', and 'Cancel'.

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## Service Module Fields in Service Plan

1. Access the *Service Details* page for your bandwidth usage service plan.

2. In the *Custom Field Defaults* section, click **edit**.

The screenshot shows the 'Edit Service' page with the 'CUSTOM FIELDS' section active. The 'BANDWIDTH BILLING' section is expanded, showing the following fields: Billing Method (Not Billed), Credit Limit (\$ 00.00), and Usage Basis (Account). Other sections include TICKET BILLING, POWER CIRCUIT BILLING, BANDWIDTH NOTIFICATION, BACKUP BILLING, and QUICKBOOKS. The right sidebar shows 'BILLING' settings, 'APPLICABLE TAXES', 'OUTSTANDING INVOICES', 'CHILD SERVICES', 'SERVER DETAILS', and 'CONTACTS'.

The *Edit Service* page appears with the *Custom Fields* section active.

3. In the **Billing Method** field, select the calculation method for billing.
  - Not Billed does not charge for bandwidth overages. The monthly amount due for the parent service will still be billed.
  - 95<sup>th</sup> Percentile involves the service's associated switch or router measuring (or sampling) bandwidth, typically every five minutes, and saves the data to a log file. At the end of the month, the samples are sorted from highest to lowest with the top five percent, equaling approximately 36 hours of a 30-day billing cycle, thrown away. The next highest measurements become the billable use for the entire month.
  - Total Transfer includes a total number of included mb, gb or tb along with an overage rate for the specified unit of measure for the month.
  - Outbound Transfer includes a specified amount of included mb, gb or tb for outbound traffic, along with an overage rate for the specified unit of measure for the month.
  - Inbound Transfer includes a specified amount of included mb, gb or tb for inbound traffic, along with an overage rate for the specified unit of measure for the month.
  - Outbound 95<sup>th</sup> Percentile uses the 95th percentile described above for outbound usage.
  - Inbound 95<sup>th</sup> Percentile uses the 95th percentile described above for inbound usage.
4. In the **Included Transfer** field, enter how much default data is permitted, before overages, for a given billing period.
5. In the **Included Transfer Unit** field, select the unit of measurement for the Included Transfer field.
6. In the **Overage Unit** field, select the unit of measurement for the Overage Rate field.
7. In the **Overage Rate** field, enter the dollar amount to be charged for overages.
8. In the **Associated Devices** field, enter any associated device ID numbers separated by commas.
9. All other remaining fields should be left blank.
10. Click **Save**.

The screenshot shows the 'Edit Service 263' page with the 'CUSTOM FIELDS' section active. The 'Bandwidth Billing' section is expanded, showing the following fields: Billing Method (Total Transfer), Included Transfer (100), Included Transfer Unit (GB), Overage Unit (GB), Overage Rate (.50), Associated Devices (123, 456), Overage Service ID, Tier 2 Minimum, Tier 2 Rate, and Filter Device Rule. The 'Cloud Billing' section is also visible, showing Credit Limit (\$ 00.00). The 'Save' button is highlighted with a red circle.

## Configuring Tiered Bandwidth Billing

When using tiered bandwidth billing, you can charge different rates depending on the amount of bandwidth used. Each bandwidth usage tier is defined by a minimum amount and a rate, with the standard bandwidth billing fields comprising tier 1, with a minimum of zero. the tier minimum values are based on the overage, not the usage.

You can set default values for these amounts on the *Data* tab for either a service plan or a client-specific service, and the amount of tiers available is unlimited.

bw\_tierX\_minimum

bw\_tierX\_rate

where X is a number greater than 2.

In order to configure a server with 100GB included transfer, then \$0.50/GB up to 1000GB total transfer, then \$0.30/gb for any further usage, the configuration is:

```
bw_billing_method      transfer
bw_included_transfer   100
bw_included_transfer_unit GB
bw_overage_unit        GB
bw_overage_rate        0.50
bw_tier2_minimum       900
bw_tier2_rate          0.30
```

## Related Topics

[Managing Service Plans](#)

[Adding and Configuring a Monitor](#)

[Associating a Device with a Client and a Service](#)