NetCONNECT Technical Note

ADSL2+ Line Profile Management for Cerberus ADSL2+ Services

Line Profiles

Cerberus ADSL2+ services are delivered using the BT 21CN network. Until recently, BT's DSLAMs would always run DLM (dynamic line management) on ADSL2+ circuits to achieve the best speed while maintaining a stable connection. This feature was usually effective at determining the optimal profile for a line in terms of SNR and Interleaving, but with some line conditions, it could select a sub-optimal profile. DLM also uses a period of "training" after a line is installed which could cause loss of sync on a newly provisioned service. Also, it would not always respond appropriately as required after a change of line conditions. Lastly, changes of profile via the previously available tool would take several hours to take effect, and would be subject to DLM afterwards so could be reverted.

Based on updated tools from BT, Cerberus now allows for direct user-driven management of line profiles and disabling of DLM. This has the following benefits:

- User selected SNR and Interleaving based on current line conditions and previous historical experience
- Disabling DLM means user selected profiles are not subsequently changed by automated systems
- Changes to profile take effect within 5 minutes

Cerberus now makes the tools for editing line profiles in NetCONNECT for self-service troubleshooting.

Line Profiles Available

Cerberus offers the following settings for managing the performance and stability of Cerberus ADSL2+ services via line profiles.

Downstream SNR
3db (not recommended)
6db
9db
12db
15db

Upstream SNR
6db
9db

Interleaving	INP*
OFF	0
MEDIUM	1

* Interleaving and INP settings are always set in combination. They cannot be set separately.

To set these options, follow these steps.

1. In NetCONNECT, go to **Services** and find the Cerberus ADSL2+ service you wish to manage using the available search criteria. If your search returns multiple results, click on the Inventory ID to take you to the Service Detail Page.

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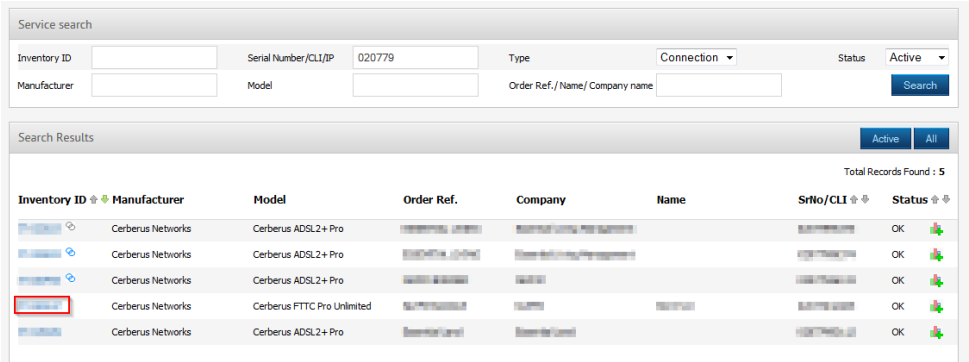
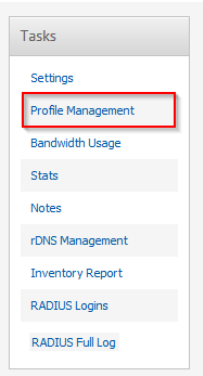
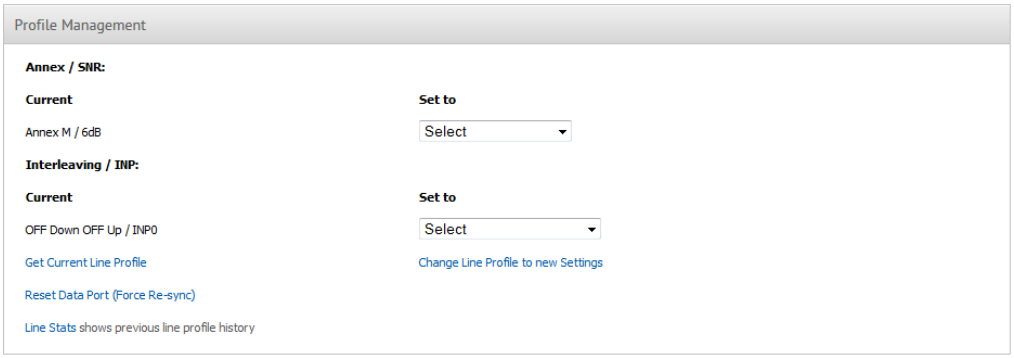


2. Once on the Service Details page, click **Profile Management** in the **Tasks** panel on the right of the page.

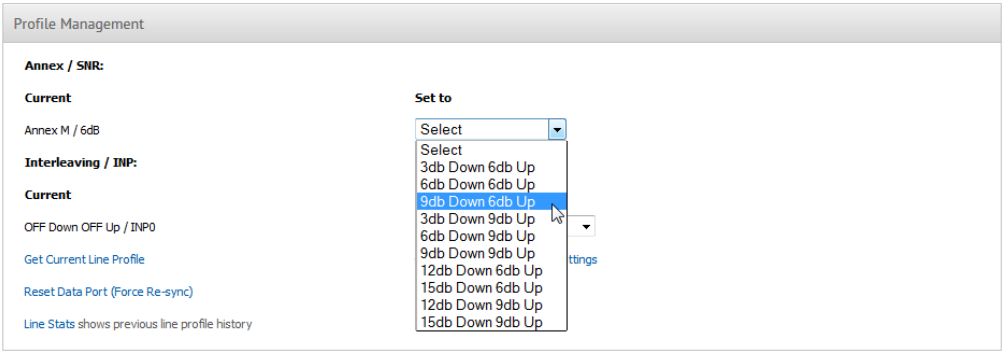


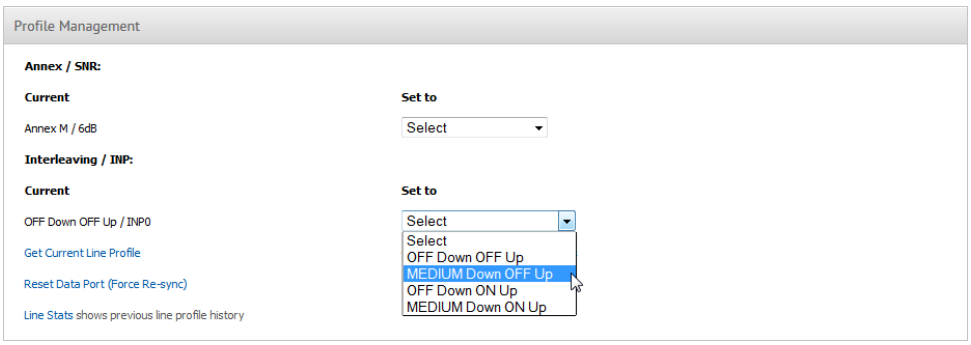
3. In the **Profile Management** pop-up you will see the current profile for **SNR** and **Interleaving**. If this is not set, then you can **Get Current Line Profile** to request this data from the DSLAM.



To change the profile for the line select a new value for both **Annex / SNR*** and **Interleaving / INP** in the drop-downs marked **Set to**

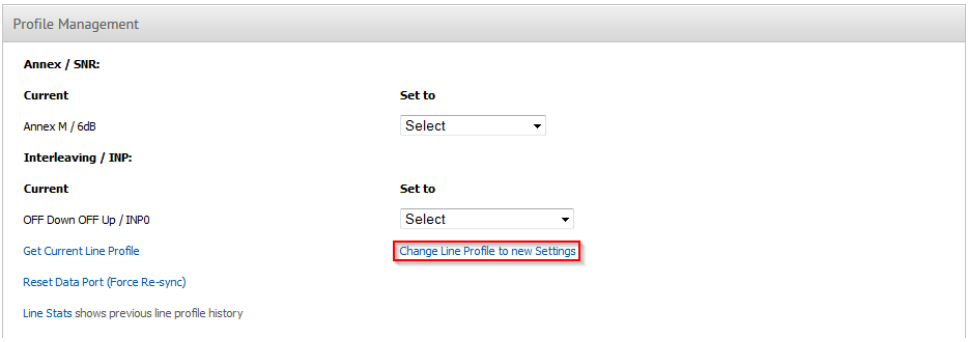
* See note below on changing the Annex on a line.



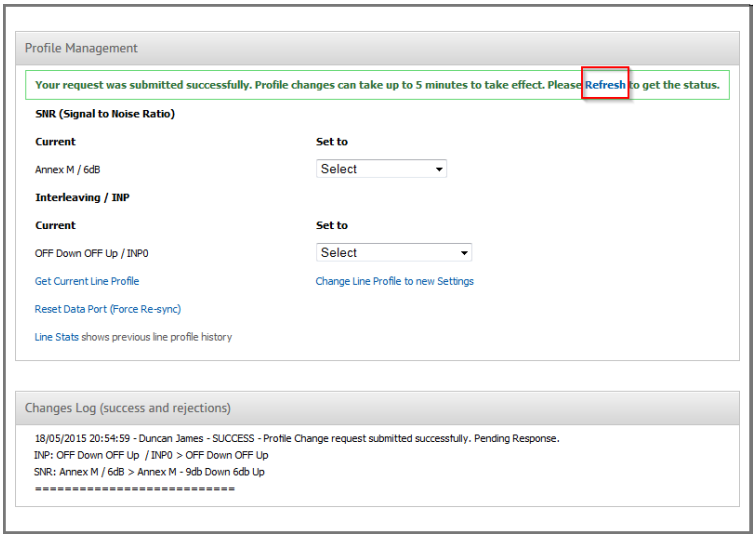


Both drop-downs specify the combination of upstream and downstream settings for the line.

4. After setting the required options for SNR and Interleaving, then click **Change Line Profile to new Settings**.



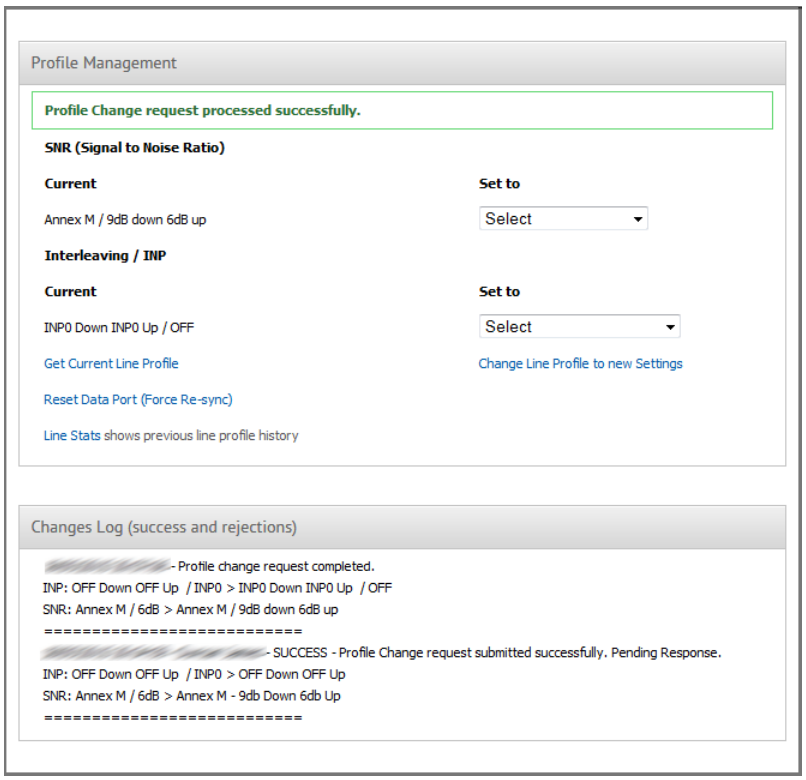
5. The Profile Management page will be refreshed with confirmation that the request was successful.



Changing profile takes between 3-5 minutes. At first you will see the status of the request shown in the Changes Log as submitted successfully.

After 3-5 minutes, you can click on the **Refresh** button to refresh the status of the update.

After the profile change has been successfully completed you will see this reflected in the notification at the top of the page, as well as in the Changes Log at the bottom of the page.



If you close the **Profile Management** page, then just click on the **Profile Management** button in the Tasks section of the Service Details page to review the status of the update.

Note on changing Annex setting for lines

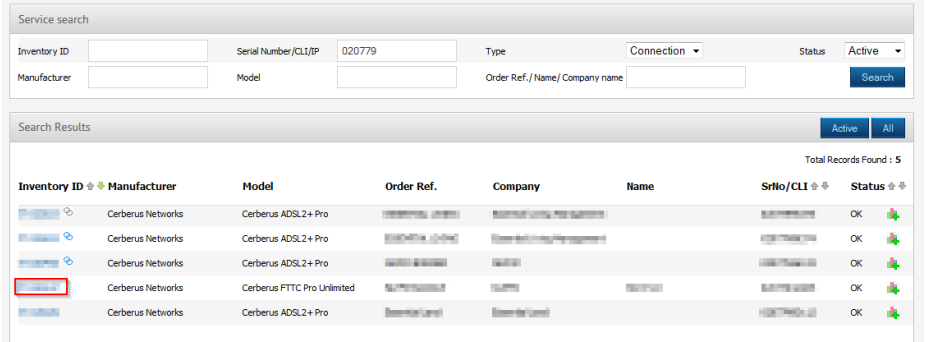
It is not currently possible to change the Annex setting for an ADSL2+ line. If you wish to change the Annex for a Cerberus ADSL2+ Standard or Business service to Annex M, then you must upgrade to Cerberus ADSL2+ Pro. If you have a Cerberus ADSL2+ Pro service and wish to change the Annex from M (default) to Annex A, then please contact the Support Team.

If the DSLAM is set to Annex M and your router is configured to only sync with the DSLAM using Annex A, then the DSLAM will negotiate with the router and sync using Annex A.

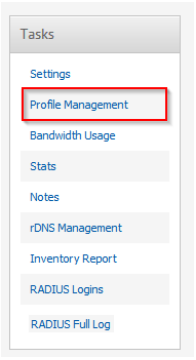
Reset DSLAM Port

In some cases, it can be useful to reset the port on the DSLAM for a given ADSL2+ line. This can be if the router has a stale session or else has entered a non-working state and needs to re-sync with the DSLAM and/or re-login over PPP. To perform this operation follow these steps:

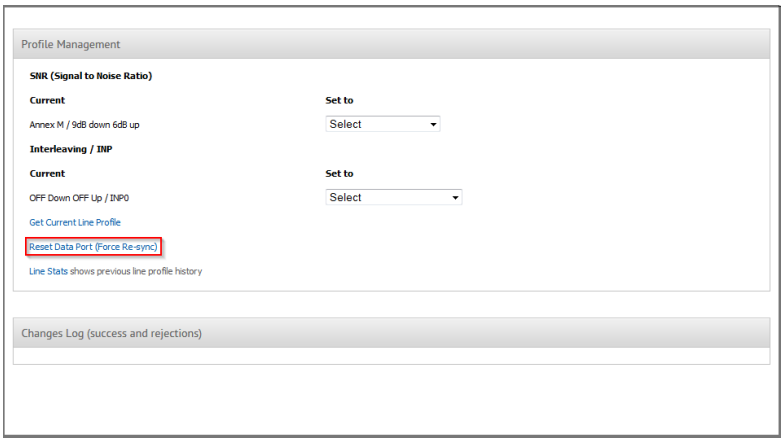
1. In NetCONNECT, go to **Services** and find the Cerberus ADSL2+ service you wish to manage using the available search criteria. If your search returns multiple results, click on the Inventory ID to take you to the Service Detail Page.



2. Once on the Service Details page, click **Profile Management** in the **Tasks** panel on the right of the page.

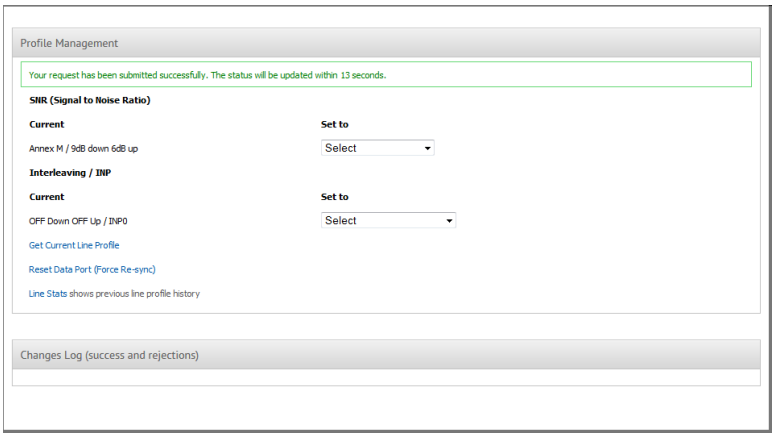


3. In the **Profile Management** page, click on **Reset Data Port (Force Re-Sync)**.

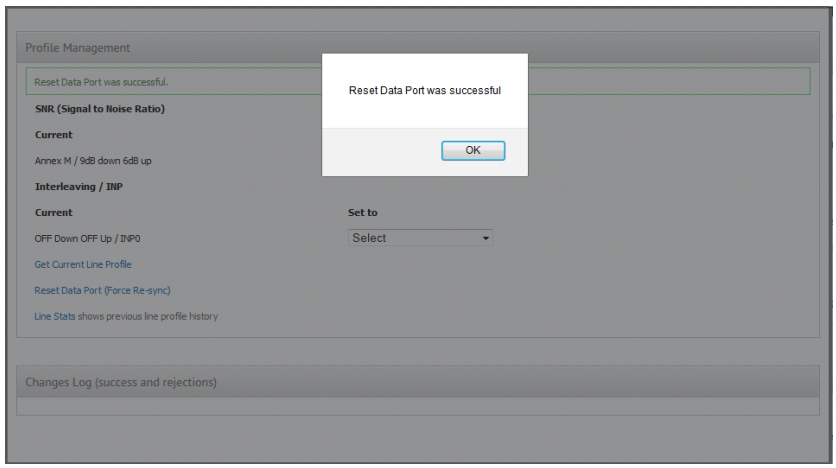


You will see a confirmation dialog before the port reset will proceed. Click **Cancel** if you do not wish to proceed.

4. Resetting the DSLAM port takes 20-30 seconds. At first you will see the status of the request as submitted successfully.



The page will update automatically when the timer in the confirmation message reaches zero. You will then get confirmation that the port reset completed with a dialog box.



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