



Adaptive Change History

6th July 2010

Adaptive 9-20 – Changes from 9-10

1. Major addition to options available for Call Blending

Version 9-20 introduces new settings that enable customers to choose how Progressive and Predictive Dialler calls are blended. As this is a major enhancement, we have documented below what the system did pre version 9-20 and how it can now be configured. **Please note that on upgrade NOTHING WILL CHANGE so customers not wishing to utilize this modification need take no action.**

Blending is the name given by the Adaptive system to the algorithm that is used to decide which type and piece of work is delivered to the user. Internally the function is called “Blending” and the work to decide which piece of work to deliver is called “get next”.

Blending takes place in both the Adaptive Desktop and the Adaptive Predictive Dialler and both can work together so that all media and call types are blended.

The types of work that are handled by blending in the Adaptive Desktop are:

- Inbound phone calls
- Inbound Messages (emails / SMS)
- Scheduled Call-Backs (Adaptive Desktop manually scheduled work + Web Assist Call-Backs)
- Web Assist Web Chats
- Undialled Progressive calls
- User rescheduled Progressive calls
- Engaged rescheduled Progressive calls
- Unanswered rescheduled Progressive calls
- Additionally there are Progressive Dialled calls that are reserved for a named user

The types of work that are handled by blending in the Adaptive Predictive Dialler are:

- Undialled Predictive calls
- User rescheduled Predictive calls
- Engaged rescheduled Predictive calls
- Unanswered rescheduled Predictive calls

The Adaptive System does NOT manage the distribution of inbound telephone calls. Instead it allows the telephone system to do this work. To enable blending of inbound calls and other work, the Adaptive Desktop uses two simple settings:

- Do-Not-Disturb – this is set by the Adaptive Desktop when the user is presented with a message or call by the Adaptive Desktop. By setting DND on the user’s telephone handset during non call work, the telephone system will not deliver inbound phone calls to that user. Note you can configure for DND to be set or not because in some circumstances you might still want inbound calls to be delivered, when, for example the user is dealing with emails.
- Blending time – this is the number of seconds that the Adaptive Desktop WAITS after the user has become free (and any wrap-up time etc has ended) BEFORE it starts to look into the Queues for other work. The idea is that any phone calls that are queued in a hunt-group will be delivered to the user as soon as the telephone system sees that the telephone extension associated with the user has become free. Blending time is set as a system wide default in the Adaptive Management Console, Config, CTI Gateway, Blending tab, or as a user specific setting (which overrides the default setting) in the User Config, Queues tab.

Inbound Blending and User Availability in the Adaptive Predictive Dialler

The Adaptive Predictive Dialler has been designed to take into account the blending time and user status as part of its algorithm. Before the Adaptive Predictive Dialler will start to include a user in its count of “available users” (which is what it uses to decide how many calls to dial) it waits for the number of seconds specified in the blending settings (checking both default and user specific) if the user is still available AFTER this time, then that user will be counted as available and calls dialled accordingly.

In practice this means that the decisions made by the Adaptive Desktop blending take precedence over those made by the Adaptive Predictive Dialler. In other words, you can blend inbound, message and Progressive dialling work AND Predictive Dialler work.

User and Team Queues

All Adaptive queues can handle all types of work that the Adaptive system supports. You can for example have a single queue into which all types of work are placed. You can also have different queues and into each one put different types of work, for example, a queue for inbound email messages, another for outbound Progressive Dialler calls and one for Web Assist call-backs. You can also have many queues with the same type of work.

The list of queues and the order that they are serviced by a USER is configured in two places: Adaptive Management Console, **Config, User** and **Config Teams**. Queues configured for the user take priority over queues configured for the team.

The list of queues and the order that they are serviced for the Adaptive Predictive Dialler are configured in the Adaptive Predictive Dialler settings.

Call Blending - Pre version 9-20

In both the Adaptive Desktop and the Adaptive Predictive Dialler, the order of queues will determine the order in which work is presented to a user.

1. In the Adaptive Desktop the algorithm works as follows:
2. First a list of queues is constructed with the user queues are the top and team queues below, for example:

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<user specified queue 1>  
<user specified queue 2>  
<team specified queue 1>  
<team specified queue 2>
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3. Next the Adaptive Desktop will start with the topmost queue in the list and look for any scheduled calls that are due in the past or now (note scheduled could mean manually scheduled by a user or system scheduled due to being engaged or unanswered). If none are found it will look in the next queue down the list and again if no work is found it will repeat for the whole list of queues.
4. Assuming no scheduled calls, that are due now or in the past are found, it will look in the topmost queue for the oldest piece of work and present that. If there is no work in the topmost queue it will look in the next queue down the list, for the oldest piece of work and again if no work is found it will repeat for the whole list.
5. If after looking in all queues there is no work to do, it will then wait for the period of time specified in specified in the system default blending (or user specified blending if that is set) before repeating the process.

Call Blending - 9-20 Modifications

NMS recognises that some customers need to be able to process work in a different way to the current blending. As such, we are investigating options that could be introduced to provide more flexibility. These are:

- Ensure that the Adaptive Desktop and Adaptive Predictive Dialler can recognise the difference between a call that has been rescheduled for a time and date by a user (i.e. by clicking the Progressive Dialler Campaign Call Dialog vs. calls that the system rescheduled due to being engaged or unanswered.
- Ensure that the system can differentiate between calls that are rescheduled by a user (and NOT by the system) and that have been reserved for an agent (vs. those that have not been reserved for a specific user)
- The Adaptive Desktop has the facility for users to be able to schedule call-backs for themselves others. The Blending system should be able to recognise these scheduled calls and to treat them as the same as agent reserved scheduled calls.

Add options in the Adaptive CTI Gateway, Blending tab as follows:

The Adaptive Desktop and Adaptive Predictive Dialler should treat calls that were rescheduled because they were engaged or unanswered as:

- Higher priority than Undialled calls (i.e. reschedule calls will be dialled BEFORE Undialled calls)
- Lower priority than Undialled calls (i.e. rescheduled calls will be dialled AFTER Undialled calls)

When the Adaptive Desktop or Adaptive Predictive Dialler decides which Undialled call to make next, select the:

- OLDEST call in the highest priority queue
- NEWSET call in the highest priority queue

2. Progressive and Predictive Diallers - Improved Algorithms

We have improved and optimised the dialling algorithms used by the Adaptive Progressive and Predictive Diallers. Customers will see a marked improvement in the products and should see an increase in connected calls. Various issues including marking calls as “Failed to Connect”, rescheduling Answer Abandoned Calls as Progressive not Predictive and in some circumstances re-calling customers have been resolved. We have also improved the behaviour of both diallers when dialling contacts with multiple numbers. The diallers can now cope with a larger array of contact numbers and cases where a contact has a second or subsequent number but there is no first number in the “Telephone Number” field.

3. Progressive Dialler - Use of Terminate with Result Code

In some cases (and particularly on some mobile telephone networks) it is possible for a call to be connected to a recorded message but the network does not identify to the telephone system that the call is out of service. In the past, the user did not have a way to both “Terminate” the call and code with a code meaning “Dial Next” or Dial Next and Do Not Retry this number”. The “Terminate” button will now take into account the action specified by a result code meaning. If no result code is selected then the default behaviour of removing the call from the queue and not retrying any number still remains the same.

4. Predictive Dialler – Support for the Banned Number List

The Adaptive Predictive Dialler now takes into account numbers in the Banned Numbers list. Any number contained in this list will be filtered out dynamically and not dialled.

5. Banned Numbers List – Update Every Ten Minutes

The Adaptive Desktop and Adaptive Predictive Dialler now both re-read the banned numbers every ten minutes. This means that any new number added will be classed as banned by any call dialled on the Adaptive Desktop, Progressive Dialler and Predictive Dialler.

6. Adaptive Desktop - Grab and Dial Settings Stored

There is a bug in previous version where the delay setting in the Adaptive Desktop, Configure Grab and Dial, Delay mS, did not get stored. This issue is now resolved.

7. Adaptive Data Controller – Calculation of Undialled calls

We have improved the way that the Adaptive Data Controller calculates the number of undialled calls in a queue. In some circumstances it was possible for this calculation to be incorrect and this has been resolved.

8. New Screen-pop Event

We have added an event called External Inbound Telephone Call Answered. This differentiates between inbound internal and external calls. In a future release events for External Inbound Telephone Call Ringing and Finished will be added.

9. Adaptive Messaging - Forwarding Address

The Email Pair Viewer “Forward to Email Address” option has been enhanced to offer the email address of the sender automatically.

10. Adaptive Data Exporter – Enhancement to Extensions Export

The Adaptive Data Exporter Service has been enhanced to ensure that all extension data is exported at the time specified in the schedule. Previously this data was exported only once per day, regardless of the schedule set.

11. Update of Mondago Drivers

Version 9-20 includes updated driver files for Mondago Go Connect. Go Connect provides a robust connection between the Adaptive products and a wide range of telephone systems. For full details of systems supported please contact your NMS Account Manager.

Adaptive 9-10 – Changes from 9-09

IMPORTANT NOTE

Release 9-10 includes changes to the data format for users and supervisors and all customers are advised to back up their AM Data folder prior to upgrade.

12. Additional Report Security Options

New options exist so that the Administrator can select which reports that a Supervisor is allowed to access. Restrictions include restrictions to extension, user queue and campaign reports. This feature will be particularly useful to users of the Adaptive Call Recorder.

13. Support for Go Connect Driver

The Adaptive software can now be used with a 3rd party CTI driver called Go Connect, which enables it to communicate with a wider range of telephone systems. For more information about the range of phone systems that can now be supported, please contact our sales team.

14. Predictive Dialler Overhaul

Extensive work has been done to improve the effectiveness of the Adaptive Predictive Dialler. In addition a number of calculation and reporting issues have been resolved. All users of version 9 Adaptive Predictive Dialler are advised to upgrade to this version at their earliest convenience.

15. Macro Bug

In version 9-08 we introduced a bug in the Adaptive Screen-Pop Macros where the number popped when predictive dialling was changed from the first field in the campaign (called Telephone number) to the actual number dialled. This has been resolved.

Adaptive 9-09 – Changes from 9-08

1. Support for Windows 2008 Server for Adaptive Server and Adaptive Call Recorder.

MS Windows 2008 32 bit operating system is now supported for both Adaptive Server and Adaptive Call Recorder. Full hardware and software specifications will appear on our website in due course. In the meantime, please contact our support team for more details.

IMPORTANT NOTE: we do not currently support any 64 bit operating system.

2. Support for MS Windows 7

MS Windows 7 has been fully tested and can run Adaptive Desktop, Adaptive Management Console and Adaptive Predictive Dialler software. Further testing will take place to prove MS Windows 7 as a platform for the Adaptive Server and Adaptive Call Recorder in due course.

3. Adaptive Call Recorder - ability to work with existing SQL 2008 Server database

A new feature has been introduced that allows users to install and integrate the Adaptive Call Recorder Software with an existing SQL 2008 Server. During the installation of the Call Recorder Setup, it requires the credentials for any existing database and until the test connection utility works accordingly the setup will not proceed further. The credentials consist of instance name with their existing password (if any), this configuration applies only when using SQL 2008 mixed mode authentication. For windows mode authentication only SQL instance name is required.

This new feature does not affect the existing method whereby installing the Adaptive Call Recorder installs MS SQL Server 2005 Express and automatically creates the AdaptiveCR Database.

4. Adaptive Call Recorder - enhanced call recorder firmware

The new drivers to support pausing and restarting call recordings are now provided in a separate folder called \Drivers\DTMF_Control.

5. Adaptive Desktop – Message Database NFA bug fixed

A bug in Adaptive Desktop Message Database has been fixed. When a user right clicked single and multi-select and then NFA, the software did not work as designed. As part of testing this fix the Message Database Search criteria have also been re-tested and minor search bugs resolved.

6. NFA and Minor install bugs fixed

In version 908 we introduced a bug when installing, whereby users were asked to provide the serial number when installing Adaptive Desktop, Adaptive Management Console and Adaptive Predictive Dialler software. This has now been resolved.

5th October 2009

Adaptive 9-08 – Changes from 9-07

1. Ability to restrict access to Call Recording Database

A new feature has been introduced that allows the Administrator to restrict the ability of supervisors to access the Historical Call Recording Database report. When combined with the ability to choose to log call activity for specific extensions only, this provides the ability to prevent non-authorized users from accessing calls to a specific extension. Note the Administrator will be able to access all calls.

2. Ability to pause and restart call recordings

A new version of Call Recording Firmware is now available that enables a user to pause and restart recordings by pressing the telephone handset so that it plays a series of DTMF tones. Pressing ***#0** pauses recording and ***#1** restarts recordings. Because this feature could be activated inadvertently, the firmware is only available to supported customers and should be requested by email to support@nms-adaptive.com.

3. Reduction of Trace in AMTrace.log

In version 906 we introduced an issue that created verbose trace. There has been a workaround that used a scheduled task to delete the AMTRACE.log file every day. A patch was also released. This bug has been fixed and the scheduled task or the patch are no longer required.

4. Adaptive Desktop BLF not registering when a user logs out

This version fixes an issue whereby when a user logs out of the Adaptive Desktop their status was still showing as "Available".

23rd February 2009

Adaptive 9-07 – Changes from 9-06

1. Adaptive Management Console on client computers with some menu items greyed out.

There was an issue that in some network configurations the Management Console was unable to determine if it was running on a client computer or the Adaptive Server. A new service called the Adaptive Helper Service is now installed and this is used to enable the Adaptive Management Console to detect correctly. **Note this new service uses a port to communicate and this port must be opened in any firewall that is running on client and server computers.**

2. New Licensing of Adaptive Systems when used with Adaptive Call recorder

The Adaptive licensing system has been upgraded to provide a better matrix of features for users of the Adaptive Call Recorder. In order to install 9-07 Adaptive Call Recorder users will need to contact support for a upgraded licence. Version 9 supported customers will receive this licence free of charge. **PLEASE OBTAIN THE NEW LICENCE PRIOR TO ATTEMPTING AN UPGRADE OR NEW INSTALLATION.**

3. Mismatch of Single User Summary and Single User Detailed Report

It was noticed that in 'Historical-Single User Summary report', the time that an Agent logged-in and logged-out was different from the time it displayed on 'Historical-Single User Detailed report'. In this version, the graph in 'Historical-Single User Summary report' corresponds to the 'Historical-Single User Detailed report' by showing the peak at the correct time when the Agent's logged-in and logged-out.

4. Adaptive Desktop First Party TAPI interface

The Adaptive Desktop First Party TAPI interface has upgraded so that it works on MS Vista and tested with all version of MS Outlook

5. Installation of Adaptive Desktop TSP

Setup of the Adaptive server and Adaptive Desktop will now automatically copy the improved Adaptive Desktop TSP (AMDesktopsp.tsp) into the Windows\System32 folder. If the TSP has previously been manually installed, this will prompt a system reboot at the end of the installation.

6. Auto SMS response through SMS Gateway. (Fix to spaces in Mobile number)

In version 9-06 the ability to use Pattern Searches to extract mobile phone numbers and set the result as a 'To' field was added. However, it was discovered that spaces in the mobile number would cause messages to fail to send. The pattern search has been extended to remove spaces automatically.

7. Message Database "Live Messages" Search showing incorrectly

Messages moved to outbound queue were being shown in Inbound + Live search. The search criteria have been modified so that if an inbound message is moved to the outbound queue, it will not show when a search for live inbound messages is performed.

8. Progressive Dialler Dial Next Number

In version 9-06, we introduced a bug into the logic for Adaptive Progressive Dialler, 'dial next number' feature. This has now been fixed and the number is placed back in the queue when it's set to 'dial next number'.

9. Adaptive Campaign Editor - Data Controller Configuration

In earlier versions of Adaptive software, 'Data Controller Config' would allow you to configure without selecting the day of the week to run the session. This has been fixed and now the OK button is greyed out unless a valid set of settings have been made.

10. Data Controller Service – Multiple Campaigns

The Data Controller Service had a problem managing multiple automatic campaigns that had different settings. Prior to the fix it would update the campaigns every 24 seconds. This has now been resolved.

11. Data Controller Service Stops after 20 seconds

Some of our customers were experiencing a problem whereby the Data Controller Service would start then stop within 20 seconds if the service was running on a MS Windows 2003 Server and the server is also running DHCP service. This has now been fixed although we still recommend that the Adaptive Server software is run on a dedicated computer.

12. Call Recorder Installation.

The Adaptive Call Recorder installation has been improved and simplified.

13. Adaptive Call Recorder Service – Multi-Threading

We now have enhanced the Adaptive Call Recorder Service to enable more calls to be encrypted and compressed concurrently.

14. Real time Call Recorder Report

This is a new feature added to the Adaptive Management Console, Real Time menu. There is now a report that shows activity of the Adaptive Call Recorder including how many calls are currently recording how many calls have been recorded today and disk space utilisation.

15. New Audio player for Call Recorder

With enhanced the appearance and added new features have been added to the Adaptive Call Recorder Audio Player.

16. Hyper Engine Installation and Testing

The HyperEngine used for call recording has been updated. There is also a new test program that is installed called HyperEngineWin. This is used for testing Adaptive Call Recorder hardware.

17. Fix in Data Exporter

The Adaptive Data Exporter was not checking if it had succeeded or failed to export records on last run. This has now been resolved.

03rd October 2008

Adaptive 9-06 – Changes from 9-05

1. Call Encryption/Compression added to call recorder service and Player

Call Encryption and Compression has been added to Adaptive Call Recorder Service. The Adaptive Player has been enhanced to enable it to decompress and decrypt calls in real-time.

2. Archive & Restore

A minor problem in the Adaptive Call Recorder archive tool has been identified and fixed. This problem could prevent archived audio files from being deleted after the archive was completed.

3. Pattern Searches

In version 9-05 the ability to use Pattern Searches to extract mobile phone numbers and set the result as a To filed was added. However, it was discovered that spaces in the mobile number would cause messages to fail to send. The pattern search has been extended to remove spaces automatically.

4. Grab and Dial

Since the implementation of HTML based messages, using grab and Dial from within the Message Pair Viewer was failing. This has now been resolved.

5. Cancel All for Email Pair Viewer - Message Preview Pane

When using Message Preview option in Message Pair Viewer, the Cancel button would cancel only the current queue and still present any other queues that the user had allocated in their profile. A new feature has been added that provides a Cancel ALL button, this cancels the whole operation and closes the Message Pair Viewer and puts the user back to the Adaptive Desktop.

6. Data exporting in one single line

When exporting data from the Historical Predictive Dialler Detailed report the data would all appear on a single line. This was caused by a missing Line Feed at the end of each line of data. This issue has now been resolved.

7. Historical report for Dialling campaigns

When Historical Single User Campaign Report was generated for dialling campaigns, the outcome of some of the calls was showing as 'failed to connect'. This issue has now been resolved.

8. Adaptive Predictive Dialler Error in v9.03 to 9.05

The Adaptive Predictive Dialler was failing to recognise when users logged out of the Adaptive Desktop. This caused more calls to be dialled than required. The issue has now been resolved.

9. Adaptive Progressive Dialler in v9.03 to 9.05

Between version 9.03 and 9.05, we introduced a new bug in which when calls were assigned onto the queue Adaptive Desktop would not present calls. This issue was caused by attempts to fix issue 8 (above) and has now been fixed.