



What's New in NBX R6.0

NBX R6.0 New System Features

Updated NBX NetSet™ Utility

The user and administrator portals of the NBX NetSet utility have been redesigned for NBX R6.0. Tasks have been reorganized and simplified to provide easier navigation and easier access to information. The NBX NetSet user portal interface has been localized. Users can view their personal settings in an interface that has been localized into US English, Latin Spanish, Brazilian, Portuguese, German, French, and Italian. The NBX NetSet interface has also been designed to comply with the accessibility guidelines of Section 508 of the Americans with Disabilities Act.

Automatic Call Distribution (ACD) Enhancements

Automatic Call Distribution (ACD) enables call center operations by distributing calls to groups of agents based on specific criteria. Calling activity can be monitored and managed for best performance and customer service. NBX R6.0 extends the NBX ACD feature. R6.0 includes these ACD enhancements:

- **Least call count call distribution option** — When you employ this new call distribution option, the NBX system distributes calls to members of an ACD Group according to the number of calls handled by each agent. The agent who has handled the fewest calls, gets the next call.
- **Calling groups call distribution option** — When you employ this new call distribution option, a single call rings on all phones of the ACD Group until a member answers the call or the call times out and is routed to the group's call coverage. This option sends only a single call at a time from the ACD queue to the group.
- **Multiple group membership** — An agent with multiple skills can be a part of multiple ACD groups and receive a "fair" number of calls. For example, agent Sarah Raven is a member of CustomerGroup2, which employs Linear call routing, and CustomerGroup3, which employs Most Idle Agent routing. Sarah's call count is a total of the calls she receives from both groups, so her idle time accounts for calls that come from both groups. Ms. Raven receives an appropriate number of calls from customers regardless of which product they are calling about.
- **ACD Shifts** — ACD Shifts allow you to break down calling statistics into meaningful chunks. At the end of a shift, the calling statistics counters are reset. You can organize calling statistics into these categories:
 - A 24 hour shift (always open). This shift is always in place.
 - A shift that matches any of the three NBX Business Hours settings, which also affect the Auto Attendant menus. A call to the ACD Group during operating hours is routed to the agents. A call that comes in outside of the operating hours hears a "closed" announcement and is then forwarded to call coverage.
 - One of 4 custom configurable shifts.
 - Dynamic or emergency shifts, which allow you to manually open one or more shifts.
- **Announcements** — In addition to Delayed Announcements, already a part of NBX ACD, NBX 6.0 enables you to record these new types of ACD announcements:
 - Estimated Wait Time
 - In-queue Exit
 - Group Closed

If enabled, your Delayed Announcement is followed by the Estimated Wait Time, and then In-queue Exit announcement. The In-queue Exit announcement tells a caller who is waiting in the queue which digit to press to go immediately to call coverage.

Group Closed announcements enable you to handle the end of day calling queue. For example, you close at 8pm. However, new calls come in at 7:59pm, and there are many calls left in the queue at the close time.

No new calls will be added to the queue after 8 pm, but the calls in queue will be served (even after 8pm). A Group Closed announcement can also handle a "force closed" situation. For example, due to an

emergency, all the agents are asked to leave (with or without logging off). Any new caller will hear the close announcement while the calls already in queue will wait until time out period elapses, and then be forwarded to call coverage.

- **Wrap-up Timer** — Wrap-up time allows an agent to take notes and perform administrative tasks after a recent call. The ACD administrator can enable the wrap-up timer and specify the wrap-up time duration (between 0 and 999 seconds). During the wrap-up time, new calls (except for personal calls and calling group calls) are not routed to the agent. A telephone button mapped to wrap-up mode remains lit during the wrap-up time. The agent can manually end the wrap-up period and be available for new calls at any time. Agents who need extra time can manually extend the wrap-up time.

- **Streaming data for external application integration** — ACD data can be streamed over a TCP socket and a client, such as the NBX ACD Desktop Statistics application, can connect to it and receive the data. The data stream includes detailed statistical data for all ACD groups and their agents. The refresh rate for the streaming data can be configured through the NBX NetSet utility.

- **A new companion application, ACD Real Time Desktop Statistics** — The NBX ACD Desktop Statistics application is a Windows client that allows supervisors to monitor ACD activity in real time. For example, supervisors can monitor the number of callers waiting for an agent, how long they have been waiting, and how many have hung up. Call centers can adjust their staffing levels appropriately to meet customer expectations. NBX ACD Desktop Statistics is available at no charge through the Downloads page of the NBX NetSet utility and from the NBX Resource Pack disk.

User Button Mappings

The NBX administrator can now allow end users to configure button mappings on their own phones. The list of user button mappings is a subset of the entire list of button mappings available to the administrator. The NBX administrator enables user button mappings on the Class of Service page. If the administrator enables the User Button Mappings check box, any user who belongs to that Class of Service Group sees an extra tab, **Button Mapping**, in their Telephone Programming page when they log into the NBX NetSet utility. The Button Mapping tab appears in the user's NetSet utility Telephone Programming page only if the NBX administrator has enabled the User Button Mappings option for the Class of Service. The Button Mapping page shows the user which buttons can be reprogrammed. The end user and the administrator are on an equal standing when changing button mappings. That is, the change that was last made to the specific button mapping is the mapping that would be in effect, whether the administrator or the end user made the change. Telephone button functions that are available for user remapping:

NBX Licenses Backup Enhancement

New in R6.0 is the option for an administrator to include licenses in a system backup instead of performing a separate license backup operation.

Supervisory Monitoring

Supervisory Monitoring is a feature that is used primarily for ACD support. The Silent Monitor function of Supervisory Monitoring enables monitoring of calls that are routed through ACD Groups, Hunt Group, or TAPI Route Points. Monitoring may be done with or without an agent's knowledge. The Whisper function of Supervisory Monitoring enables a supervisor to speak to an agent without the customer's knowledge. The Barge-In function enables the supervisor to join a call and speak with both the agent and the customer. Announcement tones can be configured to let the agent and customer know if the supervisor is monitoring, whispering, or barging in. NBX R6.0 includes these Supervisory Monitoring enhancements:

- **Monitoring of all types of calls** — Incoming, outgoing, and non-ACD calls can be monitored. Anyone in the system can be monitored. Also, 3-party conference calls can be monitored. (The monitoring party counts as one of the parties in an NBX conference, which supports up to four parties.)

- **Simplified supervisory monitoring** — A domain defines logical groupings of the agents who are required to be monitored by a specific set of people. An NBX 100 can support up to 49 domains and all other platforms can support up to 101 domains. Anyone who has a valid password can monitor domain members. The NBX Administrator creates supervisory monitoring domains that define the following information:

- The supervisory monitoring domain's unique name and password
- The types of calls that can be monitored (Incoming Group Only calls or All calls)
- The calling groups (ACD, Hunt Group, or TAPI Route Point) that can be monitored
- The agents (users) who can be monitored
- Announcement tones for Silent Monitor, Whisper, and Barge-In modes

Privacy List Domain — A special system domain called the Privacy List specifies users who cannot be monitored. In addition, only the NBX administrator can define users for the Privacy List domain. The administrator cannot add Hunt groups, ACDs, or TAPI Route Points as members to the privacy list.

Call Privacy feature — Call Privacy allows a user to prevent a call from being monitored. NBX telephone users can toggle Call Privacy on and off to block or accept supervisory monitoring on a call-by-call basis. In contrast, membership in the Privacy List domain set by the NBX Administrator ensures that all calls associated with this user cannot be monitored. If the NBX Administrator assigns a user to a CoS group that allows Call Privacy, the user can use Feature code 428 to prevent a current call from being monitored as follows:

- You can activate the Call Privacy feature before a call (for example, by going off-hook and dialing Feature code 428 and then dialing an internal or external call), or during a call (for example, by dialing Feature code 428 after answering an incoming call). If you activate Call Privacy while on a call that is being monitored, the monitoring session is ended. The telephone display panel shows "CALL PRIVACY ON" when this feature is activated.
- When an active Call Privacy session ends, (for example: you activate Call Privacy, initiate a call, and then exit the call) the Call Privacy settings are no longer applicable and the next call is open to monitoring.

Enhanced security — The NBX admin log is updated whenever any of these events occur:

- When the NBX administrator enables or disables supervisory monitoring system-wide.
- When a domain is added modified or deleted.
- When someone attempts to view domain reports in the NetSet utility using the wrong password.
- When a user attempts to monitor another user by activating feature code 425, and then and using a wrong password. (After the maximum password retries are exceeded.)

WhisperPage

The WhisperPage feature allows you to dial an NBX extension that is involved in an conversation with another person and speak to that person without the other party on the call being able to hear you. WhisperPage is typically used in the workplace by an assistant and manager. While a manager is on a call, an assistant can start a WhisperPage session to alert the manager of an important meeting or call. During the WhisperPage session, the assistant cannot hear the manager or the third party and the third party cannot hear the comments of the assistant. If the manager is not on an active call when the assistant starts a WhisperPage session, a call is placed just as if the assistant dialed the manager's extension. A typical WhisperPage session occurs as follows:

1. An assistant initiates a WhisperPage through feature code 426 or a programmed system access button depending on the type of telephone and how it is configured by the NBX administrator.
2. The manager might hear an alert tone announcing the WhisperPage request. The display panel on the manager's phone shows the caller ID of the assistant and the WhisperPage icon for 5 seconds, and then the display reverts back to the Caller ID information of the person the manager is speaking with. The manager also has a period of time, called the Decline Time, to refuse the WhisperPage. The NBX administrator can configure WhisperPage behavior by enabling or disabling the alert tone and specifying the Decline Time to be 0-9.9 seconds.
3. To allow the WhisperPage, the manager does nothing. When the Decline Time period expires, the assistant hears a tone that indicates that the WhisperPage session is active. The display panel on the assistant's phone displays "Whispering" and the manager's extension to indicate that the WhisperPage session is active, and the assistant can speak to the manager. The other party on the call does not hear the assistant's comments and the assistant cannot hear the manager or the person the manager is speaking to.
4. To refuse the WhisperPage, the manager can invoke the Do Not Disturb (DND) feature during the Decline Time. The assistant hears an error tone and the display panel on the assistant's phone shows a message that indicates that the WhisperPage was unsuccessful. The manager can also end an active WhisperPage session by invoking DND. If the manager invokes DND, that feature is active until the manager disables it.

5. The assistant hangs up to end the WhisperPage session. Both the manager and the assistant in a WhisperPage session must be assigned to a NBX WhisperPage domain and have appropriate WhisperPage access privileges. Users can view their WhisperPage access privileges from within the NBX NetSet utility. The NBX Administrator defines these access privileges when creating the WhisperPage domains:

- Whether or not the WhisperPage alert tone is enabled
- The waiting time before an initiated WhisperPage session becomes active
- Users (listeners) to whom you can initiate a WhisperPage session
- Users (speakers) who can initiate a WhisperPage session with you

Camp On

Camp On allows you to queue a transferred call on to a destination extension that is already in use (meaning one or more (but not all) of its system appearance lines are in use). When the in use extension becomes available, the system automatically rings that extension. This capability is referred to as Camp On with Call Transfer. For example, the user at extension 1001 calls the user at extension 1002, who then transfers the call to extension 1003. But the user at extension 1003 is on another call. (The display panel of the extension 1002 telephone shows "On Another Call.") So the user at extension 1002 invokes the Camp On feature, and then hangs up. Now, extension 1002 is on Hold for extension 1003. The user at extension 1003 hears a tone that indicates that a caller is camped on. As soon as extension 1003 is available, extension 1003 rings.

Note: *In the example above, if extension 1003 was available and ringing (but did not answer) when the user at extension 1002 tried to transfer the call, upon invoking Camp On, the call would go to extension 1003 as a blind transfer instead of being queued.*

Camp On also allows you to directly queue a call on to the destination extension when the destination extension is in use (as described above) or busy (meaning all of its system appearance lines are in use). When the in use or busy extension becomes available, the system automatically rings that extension. This capability is called Camp On Without Call Transfer or Direct Camp On.

For example, the user at extension 1001 calls the user at extension 1004, who determines that extension 1005 is busy and cannot take the call. So instead of transferring and dropping the call to the call coverage for extension 1005, extension 1004 invokes the (Direct) Camp On feature and then hangs up. The user at extension 1001 remains on hold for extension 1005. The user at extension 1005 hears a tone that indicates that a caller is camped on. As soon as extension 1005 is available, extension 1005 rings.

Note: *In the example above, if extension 1005 was available and ringing when the user at extension 1004 invoked Camp On, the call would go to extension 1005 as a blind transfer instead of being queued.*

While a call is camped on, the caller hears either Music On Hold or silence if no music is provided. The target extension becomes available when the user ends the current call or puts the current call on Hold. A system-wide Camp On Return Interval determines how long a caller can stay camped onto an extension. The default Camp On Return Interval is 180 seconds. The NBX administrator can configure it to be anything from 30 seconds to 10 minutes. If the Camp On Return Interval expires, the camped call is returned to the originator of the Camp On. For example extension 1001 calls extension 1002, and the call is then camped on to extension 1003 and extension 1002 hangs up. Extension 1003 stays busy. When the Camp On Return Interval expires, extension 1002 starts ringing. If the user at extension 1002 does not answer the call, the call goes to the call coverage for extension 1002. You initiate a Camp On call through a Feature code or programmed system access button depending on the type of NBX telephone you have and how it is set up by the NBX administrator. NBX 3100 Entry Telephones and analog telephones can use only the Direct Camp On capability when invoking Camp On.

Automatic Callback

Automatic Callback allows you to request a call back from a destination extension that is in use or unanswered. The NBX system attempts to connect you when the called party at that destination extension becomes available.

On a NBX telephone, the Automatic Callback feature is helpful when:

- The person you are calling is on another call and you want the system to generate a call back as soon as this person is available.
- The person you are calling does not answer the call and you want the system to generate a call back when this person is available. You initiate an Automatic Callback through Feature code 469 or a

programmed system access button depending on the type of NBX telephone you have and how it is set up by the NBX Administrator.

Key usage tips and limitations for Automatic Callback include:

- An Automatic Callback return interval timer, set by the NBX NetSet Administrator, determines the maximum amount of time you can wait for a call back. The range for this timer is 1 minute to 24 hours. The default is 12 hours.
- An extension can have up to five Automatic Callback requests assigned to it. Return calls are generated in the order that they were received.
- Events at the destination extension that generate a call back include:
 - Entering a feature code followed by an on-hook event
 - Invoking the Directory feature followed by an on-hook event
 - Going off-hook then on-hook
 - Using Feature + 111 to terminate a session
- You cannot initiate an Automatic Callback to:
 - An external number
 - An ACD extension
 - A Hunt Group extension
 - A TAPI Route Point extension
 - A Call Park extension
 - An extension receiving a transferred call
 - A Phantom Mailbox extension

New File System

The new file system offers faster boot times after an unexpected shutdown because it does not need to run a file system check. It is also more versatile and easily upgradeable for improved support of future improvements to the NBX system software.

Periodic Timestamp on Console

The PTOC feature sends a timestamp to the NBX system console at an interval you set. If the system experiences

a problem, the timestamp messages can provide you with an approximate time when the problem occurred.

Wideband Audio

Wideband audio extends the frequency range of call audio, which results in a more natural and intelligible conversation. Wideband audio allows users in digital end-to-end networks to experience speech quality that approaches a face-to-face communication. Traditional PSTN audio, also known as narrowband audio, averages 200 – 3400 Hz. The Wideband audio range spans 50 – 7000Hz, which dramatically extends the range of the audio frequencies reproduced in a telephone conversation.

North America Daylight Saving Time Enhancements

Starting in 2007, Daylight Saving Time will be observed in the US from the second Sunday in March to the first

Sunday in November. The NBX software will handle the new DST time changes. In addition, these new time zones

will be added:

- Canada Eastern
- Canada Central
- Canada Mountain
- Canada Pacific
- Mexico Central
- Mexico Mountain
- Mexico Pacific

NBX Applications

3Com Convergence Applications Suite on NBX

The 3Com IP Messaging Server and the 3Com IP Conferencing Server can be integrated with an NBX system to extend system capabilities. The 3Com Convergence Applications can be used to provide system features when running the NBX system in SIP mode.

NBX pcXset Soft Telephone Client

The optional pcXset Soft Telephone Client, a Windows application, supports enhanced audio compression (G.729A/B) and the user interface has been enhanced.

Multi Site Backup Tool

The optional Multisite Backup tool, a Windows application, enables you to manage NBX backups. The tool provides a graphical interface to enable you to schedule and run NBX system backups either manually or automatically.

The Dial Plan Editor

This optional Windows application enables you to more easily manage the dial plan on an NBX system. The Dial Plan Editor does not support an NBX system running in SIP mode.

NBX Call Reports

NBX Call Reports has been updated to support the new features in NBX. In addition, the record format for the data downloaded from the NBX system to NBX Call reports has been moved to XML. To enable you to make the transition to the XML data, the system allows you to generate calling data in both the old CSV format and the new XML format for a period of time.

NBX ACD Desktop Statistics

The Automatic Call Distribution (ACD) feature in NBX supports basic call center operations. The NBX ACD Desktop Statistics application is a new Windows client that allows supervisors to monitor ACD activity in real time. For example, supervisors can monitor the number of callers waiting for an agent, how long they have been waiting, and how many have hung up. Call centers can adjust their staffing levels appropriately to meet customer expectations. NBX ACD Desktop Statistics is available at no charge through the Downloads page of the NBX NetSet utility and from the NBX Resource Pack disk.