# Troubleshooting Message Flow Issues

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## Agenda

## This webcast will cover the following topics:

- 1. Top 3 message flow issues
- 2. Question and answer
- 3. Additional resources





#### Issue 1: Performance metrics

## BlackBerry® Enterprise Server for Microsoft® Exchange

- Check average RPC latency on the BlackBerry Enterprise Server and the messaging server
- Check CPU usage on the BlackBerry Enterprise Server and the messaging server
- ✓ Check average disk input and output for the BlackBerry Enterprise Server and the messaging servers
- ✓ Check Windows® performance counters on the BlackBerry Enterprise Server and the messaging server



#### Issue 1: Performance metrics

BlackBerry® Enterprise Server for IBM® Lotus® Domino®

- ✓ Make sure there are a sufficient number of threads available for the messaging server
  - 1 thread for every 10 BlackBerry smartphone users is optimal
  - By default, there are 40 threads available for each BlackBerry Enterprise Server instance. If there are more than 400 BlackBerry smartphone users, increase MaxTotalThreads to a 1:10 value
- ✓ Network latency should be less than 300ms ping time



#### Issue 1: Performance metrics

BlackBerry® Enterprise Server for Novell® GroupWise®

- ✓ Make sure the GroupWise Client and Post Office Agents are current
- ✓ Check Post Office Agent logs for error messages
- ✓ View Post Office health and server statistics using Novell Monitor
- ✓ Increase or decrease threads as necessary



#### Issue 1: Performance metrics

BlackBerry Enterprise Server for Novell GroupWise (continued)

- ✓ Make sure the Post Office can connect to the BlackBerry Enterprise Server on port 9000
- ✓ Check network latency and spikes between the BlackBerry Enterprise Server and Post office
- ✓ Turn on Minshall's Algorithm
- Move BlackBerry smartphone users with heavy data usage to a separate BlackBerry Enterprise Server instance



#### Issue 1: Performance metrics

Refer to the Performance Benchmarking Guides available at the following locations:

Microsoft Exchange:

http://docs.blackberry.com/en/admin/deliverables/8864/BlackBerry\_Enterprise\_Server\_for\_Microsoft\_Exchange-5.0-US.pdf

Lotus Domino:

http://docs.blackberry.com/en/admin/deliverables/9545/BlackBerry\_Enterprise\_Server\_for\_IBM\_Lotus\_Domino-Performance\_Benchmarking\_Guide--849841-0811103213-001-5.0-US.pdf

Novell GroupWise:

http://docs.blackberry.com/en/admin/deliverables/845/Performance\_Bench marking%5B1%5D.pdf



### Issue 2: Out of wireless network coverage

✓ Identify patterns in time and location in the BlackBerry Messaging Agent log file (MAGT)

[40913] (10/29 06:30:26.033):{0xA64} {UserName@company.com} Device 12345678 state: out of coverage

[40913] (10/29 08:23:26.033):{0xA64} {UserName@company.com} Device 12345678 state: in coverage

✓ Out of Coverage tool can help with troubleshooting wireless network coverage issues





## Issue 3: Large mailboxes, high message count, high folder count

#### BlackBerry Enterprise Server for Microsoft Exchange

- ✓ Check messaging server recommendations for mailbox sizes and maximum number of sub folders
- ✓ Check how many folders are being redirected to the BlackBerry smartphone

#### Notes:

- Some variables can be controlled at the server level
- BlackBerryHandheldInfo search folder
- Email archiving software can introduce complications when troubleshooting. The original email is replaced with stub or pointer files which increases the message count but maintains small mailbox sizes. Archiving software can also create hidden subfolders within the mailbox



Issue 3: Large mailboxes, high message count, high folder count

BlackBerry Enterprise Server for IBM Lotus Domino

- ✓ There should be no more than 10,000 items in folders being redirected to the BlackBerry smartphone
- ✓ Optimize the number of items in the redirected folders



## Question and answer





## Additional resources

#### Resources

- BlackBerry Technical Solution Center
- BlackBerry Support Community Forums
- BlackBerry® Answers
- BlackBerry Expert Support Center



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