Security Note

BlackBerry PlayBook Tablet

Print To Go

Version: 2.0.1

BlackBerry®

Published: 2012-04-17
SWD-20120417150756160

Contents

1 Print To Go 4
System requirements 4
Logging in to Print To Go 5
How Print To Go protects documents in transit 5
Data flow: Printing documents to tablets using Print To Go 6
Running Print To Go in an environment that includes the BlackBerry Device Service or BlackBerry Bridge 7
Preventing a user from using Print To Go 7
2 Related resources 8
3 Glossary 9
4 Legal notice 10

Print To Go

1

A BlackBerry PlayBook tablet user can use Print To Go to send documents from the user's computer to the user's tablet. After the tablet receives the documents, the user can view and manage the documents using the Print To Go application and Adobe Reader.

Print To Go consists of a printer driver that is installed on the user's computer, the MSDP component of the BlackBerry Infrastructure, and an application that runs on the tablet. The printer driver is certified using Windows Hardware Quality Labs testing to help ensure compatibility with the Windows operating system that the computer is running.

To send documents to a tablet, the user must provide the following items:

- To log in to Print To Go, the BlackBerry ID username and password that the user used to set up the tablet
- To encrypt documents, the password that the Print To Go application on the tablet generates

If a user suspects that a specific computer is compromised, the user can use the Print To Go application on the tablet to revoke the permissions of the computer so that it can no longer send documents to the tablet using Print To Go.

System requirements

The following system requirements must be configured to send a document from a computer to a BlackBerry PlayBook tablet.

Item	Requirement
Operating system on the computer	Any of the following operating systems: • Windows XP SP3 • Windows XP Professional x64 SP2 • Windows Vista SP1 • Windows 7 or later
Operating system on the tablet	BlackBerry Tablet OS 2.0 or later
Network connections	Network connections with the following settings:

Item	Requirement
	• Tablet has an open Wi-Fi connection to the network that the user's computer is on • Computer or tablet is not connected to your organization's network using a VPN

Logging in to Print To Go

Print To Go uses the BlackBerry ID user name and password to authenticate the BlackBerry PlayBook tablet user and find the tablet PIN. After the BlackBerry ID Infrastructure verifies theBlackBerry ID user name and password, it creates a BlackBerry ID authentication token that it can use to identify the user to the BlackBerry Infrastructure. For increased security, only the BlackBerry ID authentication token is stored on the user’s computer. The BlackBerry ID username and password are not stored on the computer but remain on the BlackBerry Infrastructure.

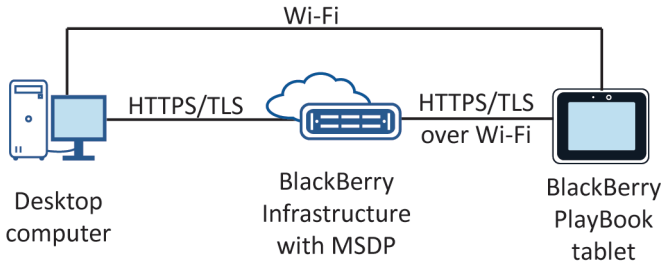
How Print To Go protects documents in transit

The BlackBerry PlayBook tablet user must provide the Print To Go printer driver on the computer with a password that the Print To Go application on the BlackBerry PlayBook tablet generates. Print To Go uses the password and EC-SPEKE to create an AES-256 key that encrypts the document before the document is sent to the tablet. The encryption helps protect the document so that a potentially malicious user cannot read the document if the potentially malicious user intercepts the document while it is in transit to the tablet.

The password is designed to provide end-to-end security because only the printer driver and the Print To Go application on the tablet know the password. The BlackBerry Infrastructure cannot decrypt the document because it does not have access to the password and Print To Go does not send the document through the BlackBerry Infrastructure.

The printer driver stores the password in a highly secure manner using the DSAPI library.

Data flow: Printing documents to tablets using Print To Go



1. The BlackBerry PlayBook tablet user clicks Print in an application on the computer and selects the Print To Go printer driver.
2. If this is the first time that a user logs in to Print To Go or if the user doesn't select the option to save the user's BlackBerry ID login information, the printer driver performs the following actions:
   a Prompts the user to log in using the user's BlackBerry ID username and password.
   b Prompts the user to type the pairing password that the Print To Go application on the tablet generates.
3. The printer driver contacts MSDP over HTTPS using TLS to locate the BlackBerry PlayBook tablet. MSDP is designed to create a highly secure peer-to-peer connection between the computer and the tablet.
4. MSDP performs the following actions:
   a Authenticates the print request and verifies the BlackBerry ID authentication token of the user.
   b Finds the tablet using the BlackBerry ID information.
   c Connects to the tablet over the Wi-Fi network using TLS.
   d Notifies the tablet of the print request.

   If the tablet is not available (for example, it's turned off), MSDP returns an error message to the printer driver.
5. The tablet creates a URL for the file transfer and sends the URL to the MSDP.
6. MSDP sends the URL to the printer driver.
7. The printer driver converts the file to PDF, encrypts the file, and sends the file directly to the tablet using the URL over the Wi-Fi network. Both the computer and the tablet must be on the same Wi-Fi subnet.
8. The tablet decrypts the file and displays a notification message to the user indicating that the file has arrived.

Running Print To Go in an environment that includes the BlackBerry Device Service or BlackBerry Bridge

After you or a BlackBerry PlayBook tablet user activates a BlackBerry PlayBook tablet using the BlackBerry Device Service, the Print To Go application runs in the work perimeter on the tablet and saves all new documents in the work partition. The user must unlock the work perimeter before the user can access the documents. If you or a user deletes all work data, the documents that are stored in the work perimeter are also deleted.

If a user uses BlackBerry Bridge to connect a tablet to a BlackBerry smartphone or if the tablet isn't activated with the BlackBerry Device Service, the Print To Go application runs in the personal perimeter and all documents are considered personal data.

Preventing a user from using Print To Go

If your organization does not use the BlackBerry Device Service, you might want to prevent a user from using Print To Go to send work documents to a personal tablet. To prevent a user from using Print To Go, you can either prevent a user from installing the Print To Go printer driver on the user’s computer or you can disable the Print To Go printer driver after installation.

To prevent a user from installing Print To Go, you can deny the user from having administrator privileges on the user's computer or you can block the web address to the Print To Go service (www.blackberry.com/PrintToGo).

Related resources

2

To read the following guides, visit www.blackberry.com/go/serverdocs.

Resource	Information
BlackBerry Device Service Feature and Technical Overview	• Architecture diagrams • Description of features and components • Data flows
BlackBerry Bridge App and BlackBerry PlayBook Tablet Security Technical Overview	• Description of how work data is protected on tablets when you use the BlackBerry Bridge app • Description of how work data is protected when it is in transit between a BlackBerry PlayBook tablet and a BlackBerry smartphone • Description of attacks that the BlackBerry Bridge pairing process is designed to prevent
BlackBerry Device Service and BlackBerry PlayBook Tablet Security Technical Overview	• Description of the security maintained by the BlackBerry Device Service, BlackBerry Infrastructure, and tablets to protect data and connections • Description of the BlackBerry Tablet OS • Description of how work data is protected on tablets when you use the BlackBerry Device Service

Glossary

3

AES	Advanced Encryption Standard
API	application programming interface
DPAPI	Data Protection API
EC-SKEPE	Elliptic Curve – Simple Password Exponential Key Exchange
HTTPS	Hypertext Transfer Protocol over Secure Sockets Layer
MSDP	Mobile Service Delivery Platform
SSL	Secure Sockets Layer
TLS	Transport Layer Security
VPN	virtual private network

Legal notice

4

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