# TOSHIBA

**Leading Innovation** >>>>



Let's start!!!



# **TOSHIBA**

### **Leading Innovation** >>>>



e-BRIDGE 2 Version 3.0 & 3.1

July 25th, 2007 Thomas Lernout Manager- Product Marketing International Distribution Division



# Agenda

#### Part 1:

- e-BRIDGE upgrade version 3.0
  - > e-STUDIO232/282
  - > e-STUDIO352/452
  - > e-STUDIO281c/351c/451c
  - > e-STUDIO520/600/720/850

#### Part 2:

E-BRIDGE ID-Gate

#### Part 3:

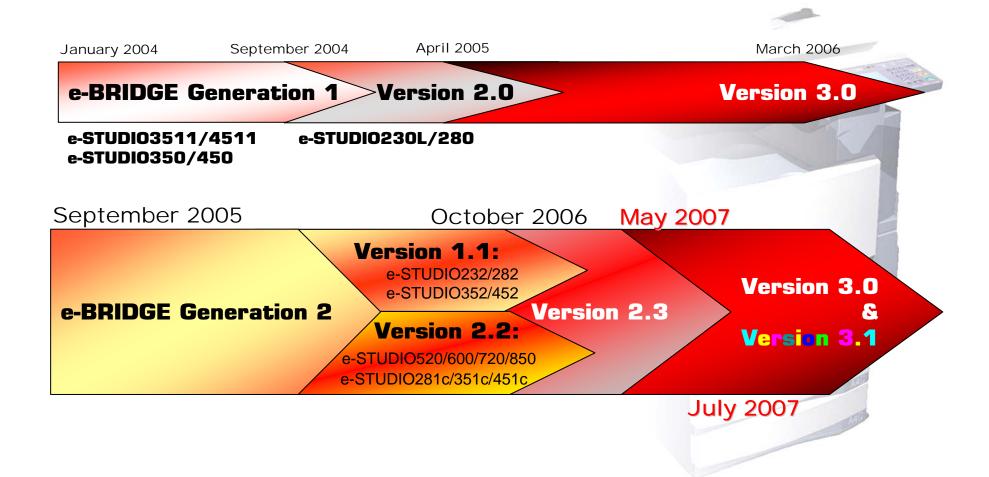
- e-BRIDGE upgrade version 3.1
  - > e-STUDIO2500c/3500c/3510c



# e-BRIDGE Concept v3.0

#### Easy to improve





# Firmware upgrade advantages

## Each firmware brings:

e-BRIDGE

- Issues fixing
- New functions (according to development plan)
- New functions (coming from customer requirements)

## Each firmware upgrade can be applied on MIF

- ⇒ For machines of the same e-BRIDGE generation
- New possibilities for current customers
- Easy implementation (USB upgrade)





# **TOSHIBA**

### **Leading Innovation** >>>>



# Part 1: e-BRIDGE 2 v3.0

- e-STUDIO232/282
- e-STUDIO352/452
- e-STUDIO281c/351c/451c
- e-STUDIO520/600/720/850



# New firmware Availability

#### **©** Firmware name:

- Available for download on WEB QS
- ⇒ Will be applied in Production in July 2007



# e-BRIDGE upgrade version 3.0

## Many improvements:

- ⇒ New driver for all e-BRIDGE systems
- Windows Vista support
  - > XPS format
  - > WSD
- New scan functions
- Role Based Access Control
- Other changes
  - > IPv6
  - Ping/Traceroute
  - New password policy



# **TOSHIBA**Leading Innovation >>>



New printer driver



# New printer driver: Full 32/64-bit support

## **©** Supported Operating Systems

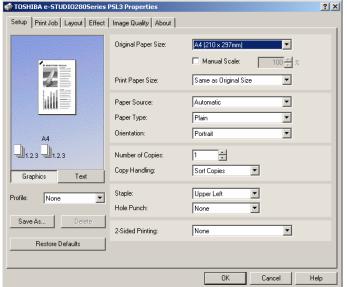


	Windows Vista 32bit	Windows Vista 64bit	Windows XP 64bit	Windows Server 2003 64bit
PrinterDriver	Supported	Supported	Supported	Supported
NW-FAX Driver	Supported	Not supported	Not supported	Not supported
DocMon	Supported	Not supported	Not supported	Not supported
AddressBookViewer	Supported	Not supported	Not supported	Not supported
Twain Driver	Supported	Supported	Supported	Not supported
FileDownloader	Supported	Supported	Supported	Not supported
RemoteScanDriver	Supported	Supported	Supported	Not supported
e-BRIDGE Viewer	Not supported	Not supported	Not supported	Not supported
BackupRestore Utility	Supported	Supported	Supported	Not supported

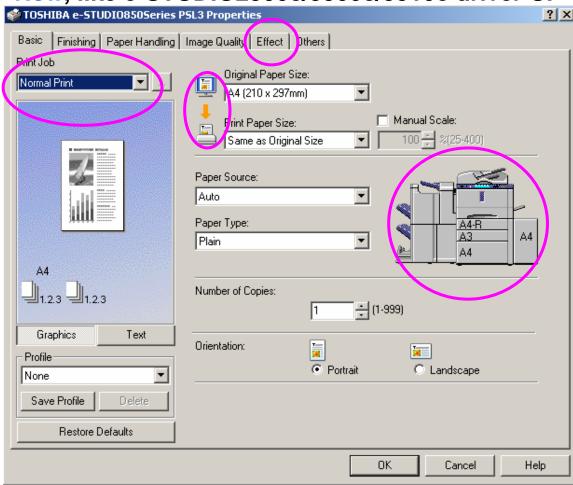
# New printer driver: new layout



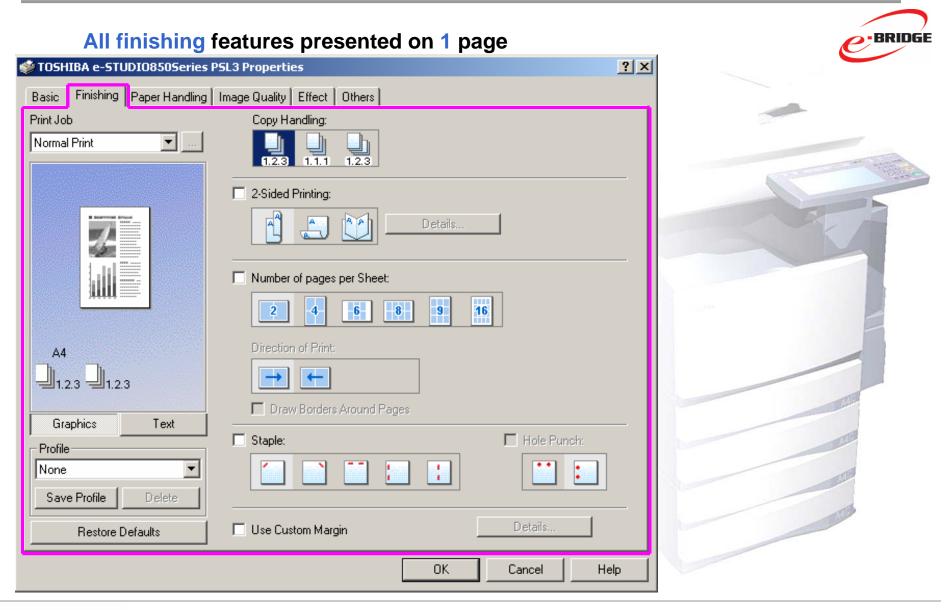
#### Actual driver user interface



#### New, like e-STUDIO2500c/3500c/3510c driver UI

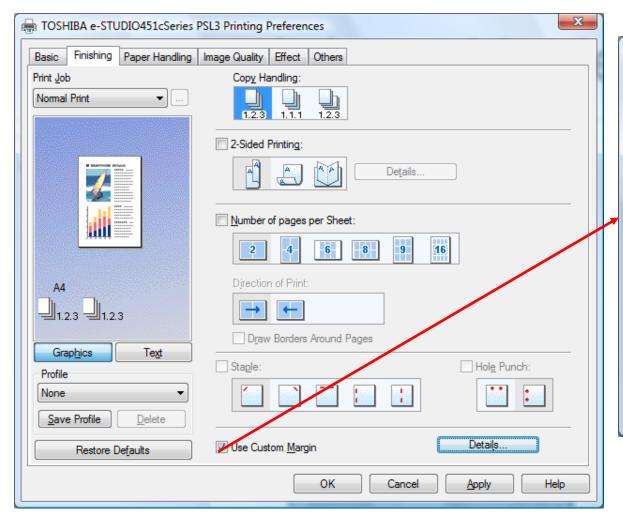


# New printer driver: new layout



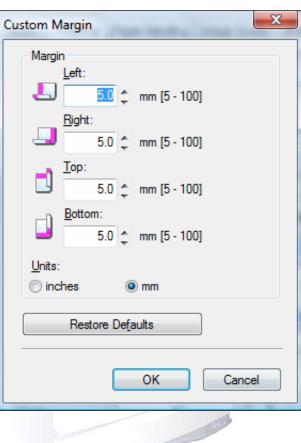
# New printer driver: new functions

### New function: custom margin









#### Printer driver can be customised:

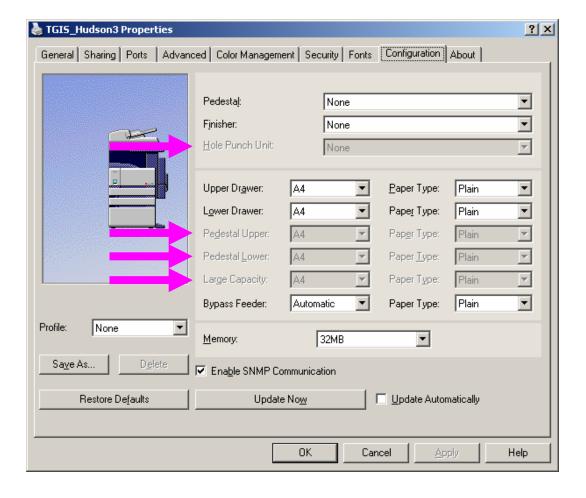
- Several possibilities:
  - Editing XML file
  - Editing Print Profile
  - Using PDC tool

#### Customisation workflow

- On request to TGIS only
- Workflow and prices have to be decided
- Information to come later

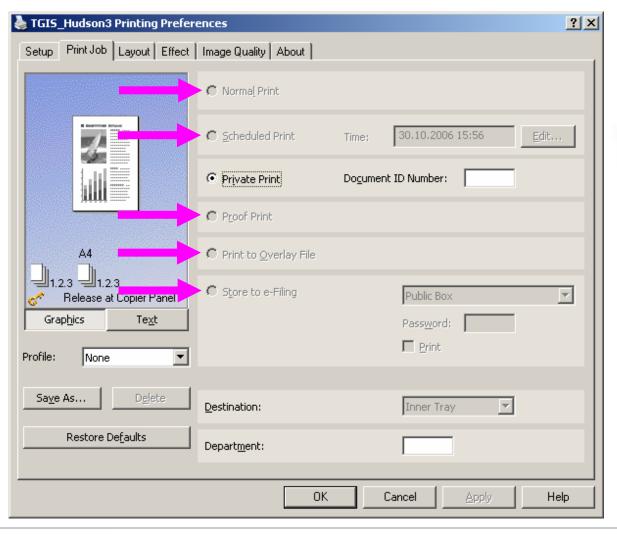


## **E** Editing XML file:





## **E** Editing XML file:

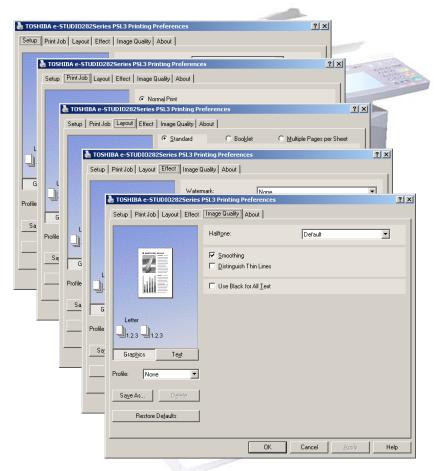




## **E** Editing Print Profiles



- Possible to change default settings for:
  - > Setup
  - Print job
  - **Layout**
  - **Effects**
  - Image Quality Tab
- XML customization is still needed for disabling functions and change the configuration tab.

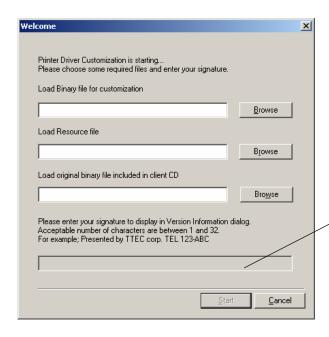


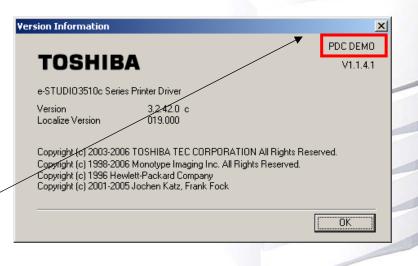


## **C** Using the **PDC** tool:



- ⇒ Tool allowing to customise ~85% of the printer driver
  - Define selection fields
  - Changing default values
  - Enable/Disable functions (greyed out)

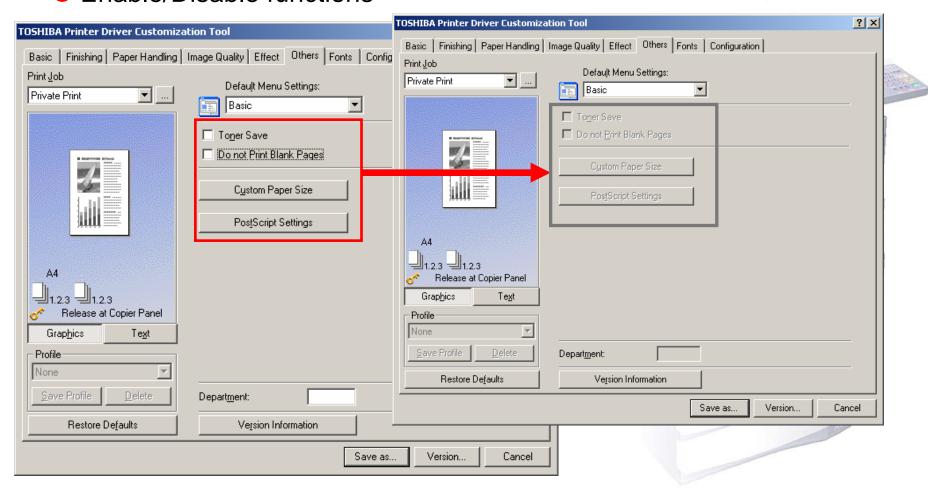




## **Using the PDC tool:**



Enable/Disable functions



# **TOSHIBA**Leading Innovation >>>>



# Windows VISTA



# **Live Meeting Poll**

#### **Question 1**

# Could you please estimate the percentage of you "Professional" customers who are already equiped with VISTA!

- 0 to 5%
- 6 to 10%
- 11 to 25%
- 26 to 40%
- 41 to 60%
- 61 to 80%
- 81 to 100%

Changes directly made to this slide will not be displayed in Live Meeting. Edit this slide by selecting Properties in the Live Meeting Presentation menu.

# Vista support: XPS

#### What is XPS?



- XPS (XML Paper Specification):
  - New document format developed by Microsoft
  - Vector-based document format which encapsulates an exact representation of the actual printed output
    - Independent from the device
    - Independent from the resolution
  - XPS is similar to PostScript and the document specification is similar to PDF
  - XPS is the native spooler in Vista and can be used as PDL
    - No conversion to a specific printer language
    - Better image quality
  - XPS allows to Print/View and Archive a document without the original application

# Vista support: XPS

#### • How to create an XPS file:

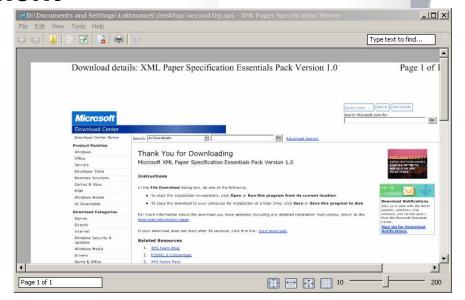


- Use Microsoft XPS document writer (FOC) in Windows VISTA
  - Appears as a printer driver



#### How to view an XPS document

- Use XPS Viewer
  - Similar to Acrobat Reader



# Vista support: XPS

## **EXPS** format one-BRIDGE systems:



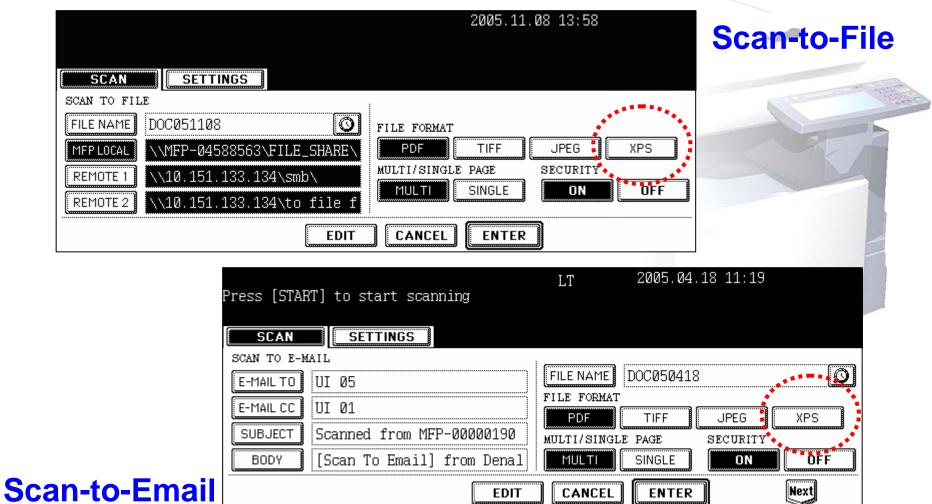
- e-BRIDGE v3.0:
  - Scan to XPS (Create XPS files via the Scan function)
- e-BRIDGE v3.1 (Full Colour) and 3.2 (other e-BRIDGE model)
  - XPS RIP with Toshiba printer driver



# Vista support: Scan to XPS

## **©** Save scan images in XPS format

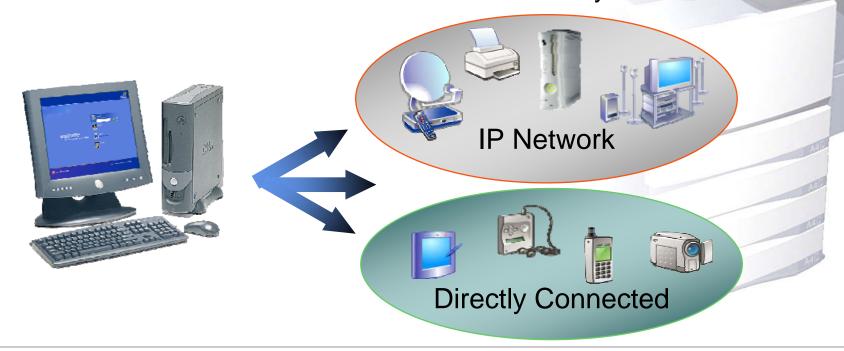




#### What is WSD?



- WSD (Web Service Devices)
- New way for the devices to communicate in the network
- Concept:
  - Unification of IP and directly connected devices
  - Users should not have to care about the way to connect



# Each device offering a Device Profile for Web Services (DPWS) can be handled via Vista WSD





### Advantages of WSD:

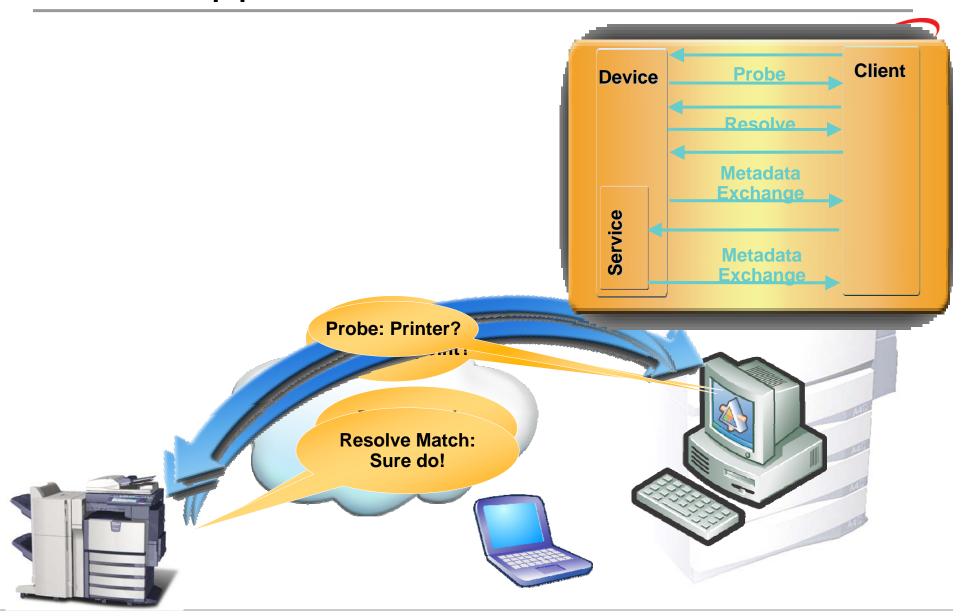


- ⇒ WSD enables a kind of Plug&Play function «PnP-X» for DPWS compatible systems (similar to USB)
- When connecting the device: many services become available without any settings
  - E.g.: Discovery service
    - System can advertise itself and discover other devices

#### **©** Good to know:

- Vista natively integrates DPWS
- DPWS is mandatory to obtain Basic/Premium Vista logo
- e-BRIDGE version 3.0 systems support DPWS (Print and Scan)

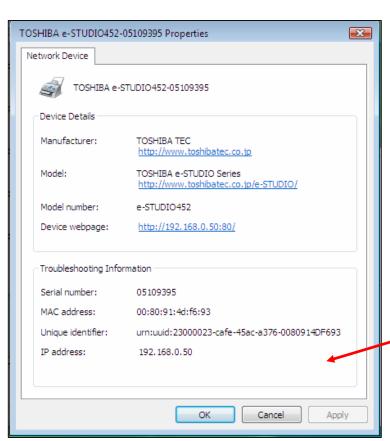


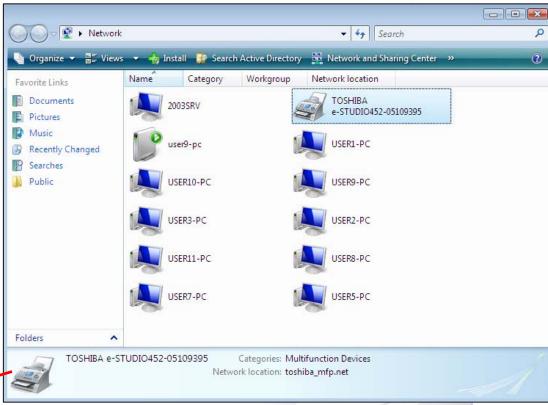


# Vista support: WSD - Print

# Network Connection of a Windows Vista computer and a Toshiba e-BRIDGE MFP





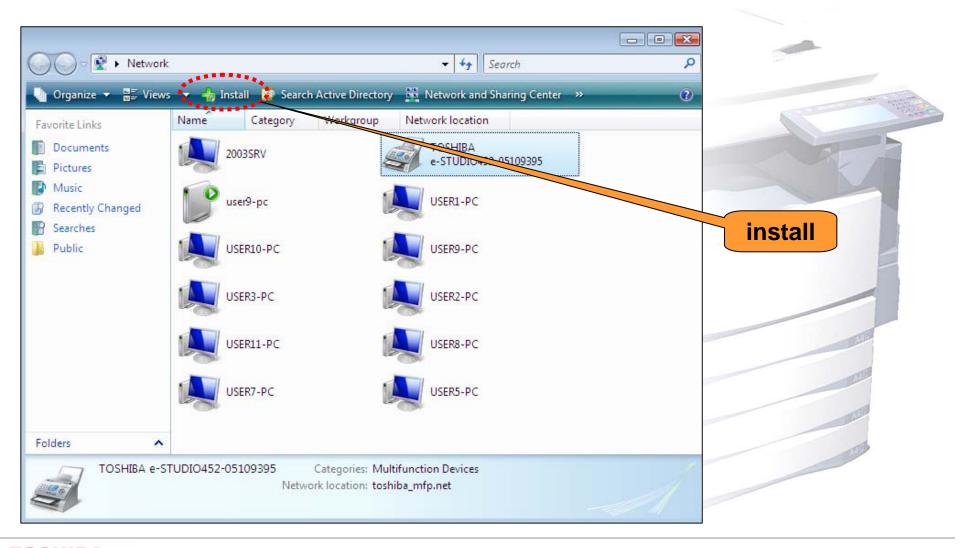


Discover a MFP device using WS-Discovery

# Vista support: WSD - Print

### Installation: Printer driver from CD-ROM





## Vista indicates that it is installing the device driver



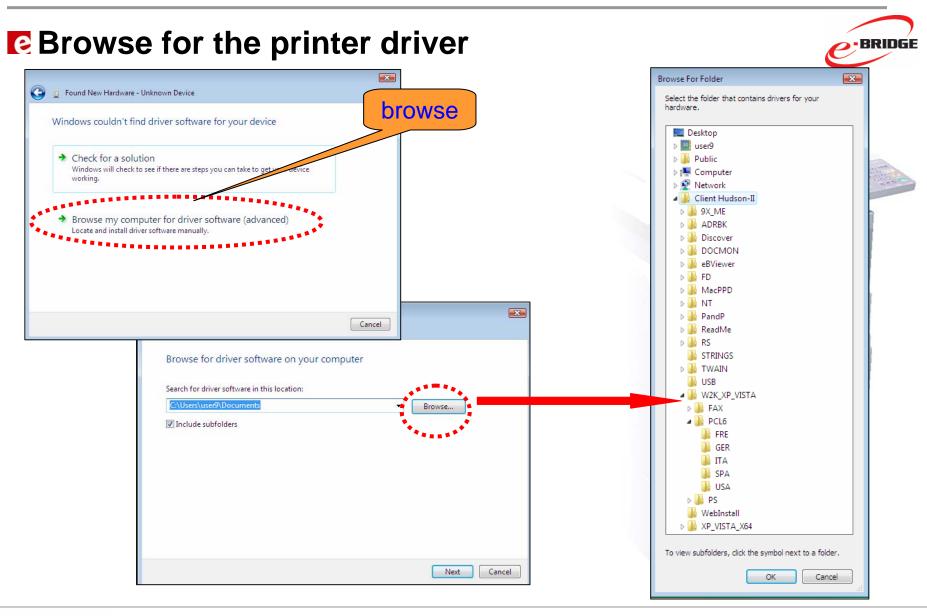


#### Vista does not have our MFP driver

- Windows will ask for driver location
- Driver is stored in special "driver tank"

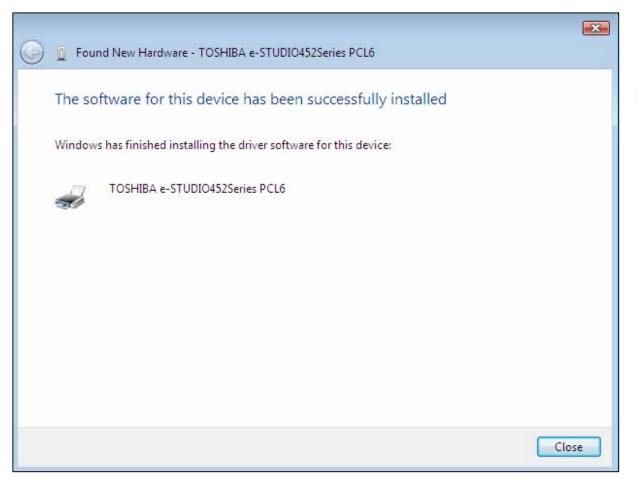


# Vista support: WSD - Print



# Vista support: WSD - Print

C Driver Software has been installed successfullyusing BRIDGE Web Services for Devices





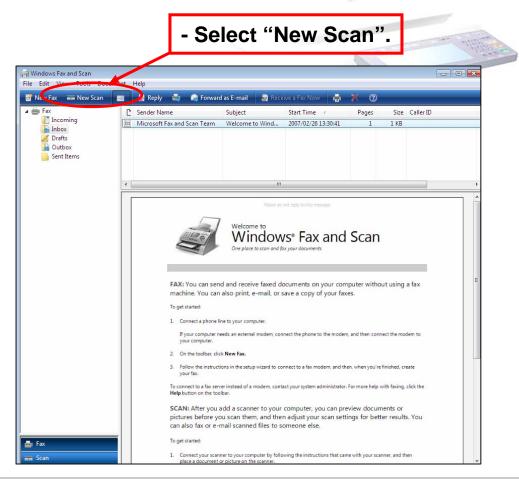
# Vista support: WSD - Pull Scan

Set the original documents on MFP



Start up "Windows Fax & Scan"



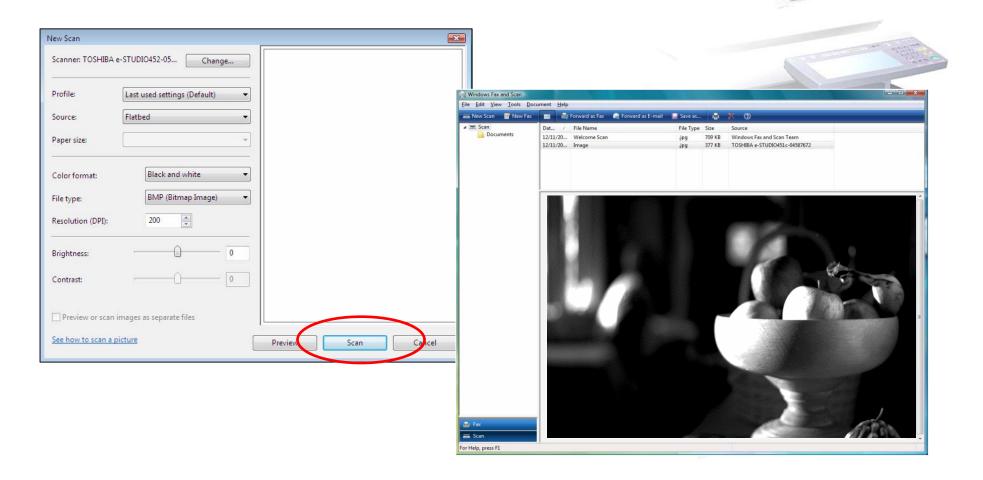


# Vista support: WSD - Pull Scan

Click the Scan button to execute



An image is retrieved from Windows Fax & Scan

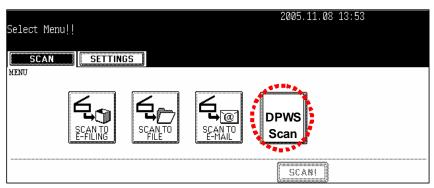


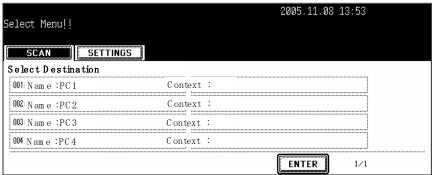
## Vista support: WSD - Push Scan

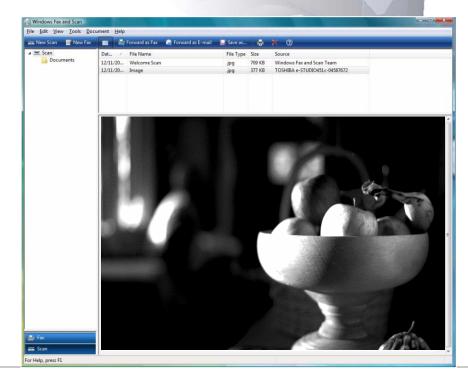
Set the original document on MFP

e-BRIDGE

- Select "WS Scan" from control panel of MFP
- Select the desired destination
- The image is retrieved from "Windows Fax & Scan"





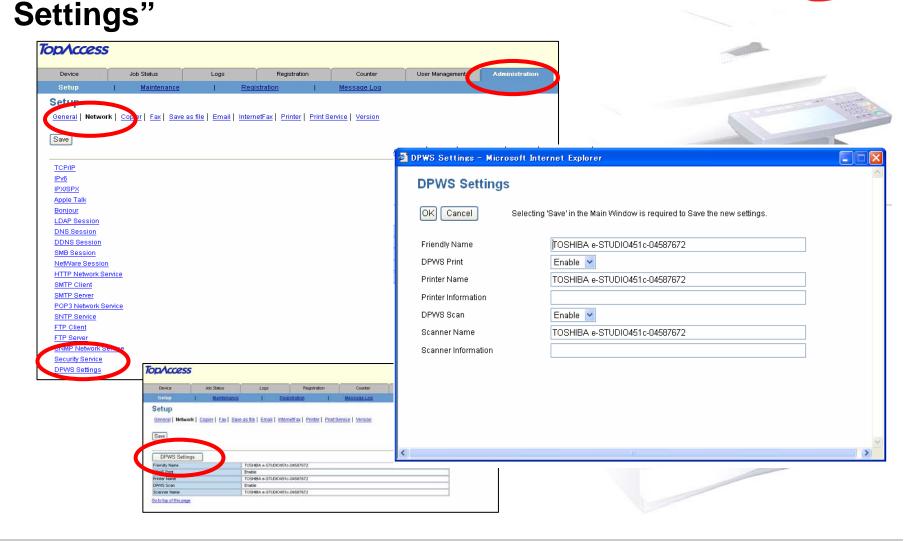




## Vista support: WSD - TopAccess

Select the Network submenu and then click "DPWS e-BRIDGE





## Vista support: Print ticket

## **EXPS** document format contains different kind of print tickets:



- JOB Tickets
- Document Tickets
- Page Tickets

## Print Tickets contain needed informations to print a document

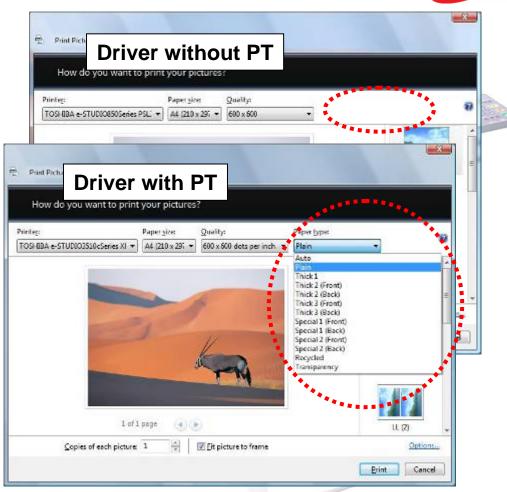
- Security
- Job build information (target system, colour handling etc.)
- Document build information (font handling etc.)
- ⇒ Page information (duplex etc.)
- e-BRIDGE v3.0 supports definition of paper type and size in print ticket.

## Vista support: Print ticket

Select print options from the application

(available options depends on the application)

- No major application available so far
  - New York times reader
  - Windows Photo Gallery



Windows Photo Gallery (Bundled with Vista)

## Vista support: Basic/Premium Logo

#### What means the Windows Logo for hardware?

e-BRIDGE

⇒ The logo helps customers to identify systems and peripherals that meet a comprehensive definition of platform features and quality goals to ensure a great computing experience for end users.

#### Basic Vista Logo



#### Premium Vista Logo





## Vista support: Basic/Premium Logo



#### Premium logo I (without XPS path)

- Requires Print or print/Scan enabler and firmware v3.0:
  - > e-STUDIO232/282
  - > e-STUDIO352/452
  - > e-STUDIO520/600/720/850



### Basic logo

- Requires 512 MB RAM and firmware v3.0 to enable DPWS
  - > e-STUDIO281c/351c/451c

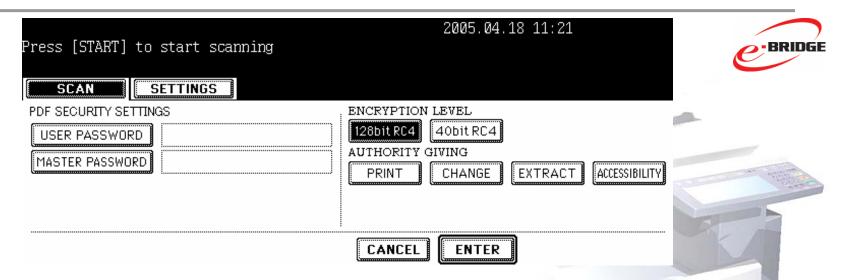


# **TOSHIBA**Leading Innovation >>>



New Scan functions





### Create automatically secure PDF via the Scan function

- 2 passwords: "Master Password" + "User Password"
  - Master password: for changing security setting of Encrypted PDF documents
  - User password: for opening encrypted PDF documents.
    - \*User Password and Master Password should not be same.
    - \*Digit number of User Password and Master Password should be 1 ~32.

### © Generate password protected PDF files

ADDRESS

COUNTER

USER

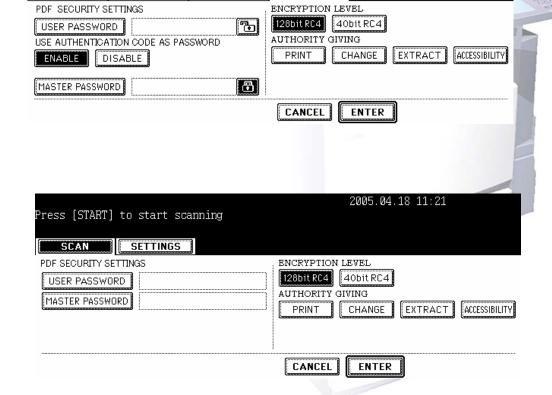


#### Admin settings

- Default Password
  - static or username
- Lock master password

## C User settings

- password
- Encryption level
- Authority properties



ADMIN

### Templates - Scan to Secure PDF



Template Setting via TopAccess

Save as file Setting			
Save Cancel			
File Format	PDF(Single) ▼		
Encryption	▼ Encryption User Password Master Password Encryption Level Authority	Printing  Change of Documents  Content Copying or Ext  Content Extraction for a	

Applied to	Scan to File	Yes
	Scan to e-Mail	Yes
	Scan to Box	No
	Copy & File	No
	Copy to Box, copy & Box	No
	Print to Box, Print & Box	No
	Send FAX/ iFAX & File	No
	PC send FAX/ iFAX & File	No
	Received FAX/ iFAX to File	Yes
	Received FAX/ iFAX to e-Mail	Yes
	Received FAX/ iFAX to Box	No
	Box to e-Mail	Yes
	Box File Downloader (client)	No
	Box File Downloader (Web)	No
	Remote scan (Twain)	No
	Remote scan (DPWS)	No
Template	Template Job	Yes
Color Mode	Full color	Yes
	Gray scale	Yes
	B/W	Yes

Page Number	1,000 pages All e-BRIDGE models except: e-STUDIO520/600/720/850 2,000 pages		
File Format	PDF Multi Page	Yes	L
	PDF Single Page		
	Slim PDF - Multi Page	No	
	Slim PDF - Single Page	No	
Security Option	No security	Yes	
	Security of password	Yes	
	Security of Digital ID	No	
	Adobe Policy Server	No	]
password	User password	Yes	
	Master password	Yes	
encryption	40-bit RC4 (Acrobat 3.0 PDF v1.1)	Yes	
	128-bit RC4 (Acrobat 5.0 PDF v1.4)	Yes	
	High 128-bit RC4 (Acrobat 6.0 PDF v1.5)	No	
	128-bit AES (Acrobat 7.0 PDF v1.6)	No	
File size	File size Color/ Gray scale/ B&W A4 200dpi / Normal PDF		

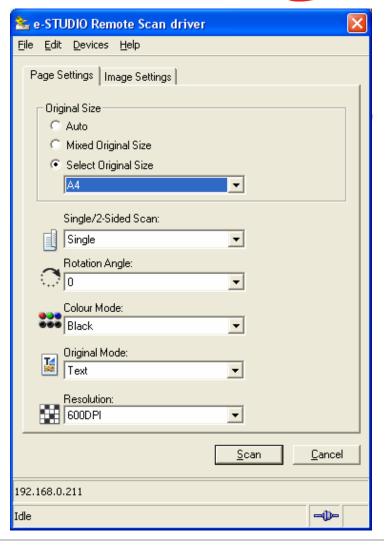


## TWAIN 1.7 support

### Real remote Scanning by default supported



- Via WSD
- Via new Remote Scan driver
  - > real TWAIN\* 1.7
  - Applications which had problems (like Imaging) now work correctly
  - MFP panel will indicate that remote scanning operation is working



\*Technology Without An Interesting Name



## Remote Scan with Department Codes

#### Remote scan driver supports Department Codes



Selectable through service code

0K
Cancel



# **TOSHIBA**Leading Innovation >>>



## Role Based Access Control



#### Role Based Access Control

#### Fully redesigned Role Based Access Control:



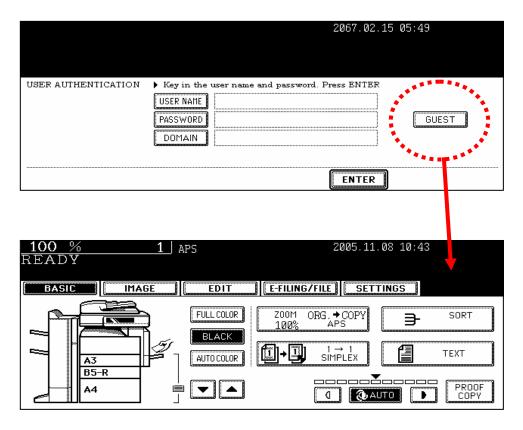
- Guest Account
  - Use device without login
- Role Mapping
  - Use RBAC without server modification
- RBAC setup improvement
  - Easier LDAP setup



#### **RBAC - Guest Account**

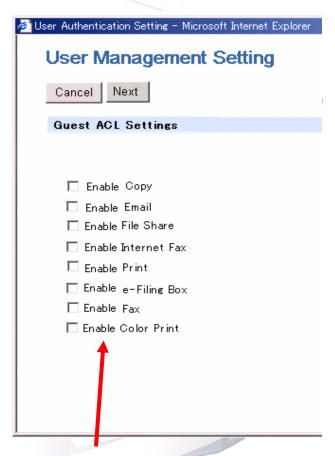
#### **©** Use the system without login

Functionalities defined by administrator



Login with "Guest" key





Admin can define guest permissions

## RBAC - Role Mapping

### RBAC without modifying the customer LDAP/AD



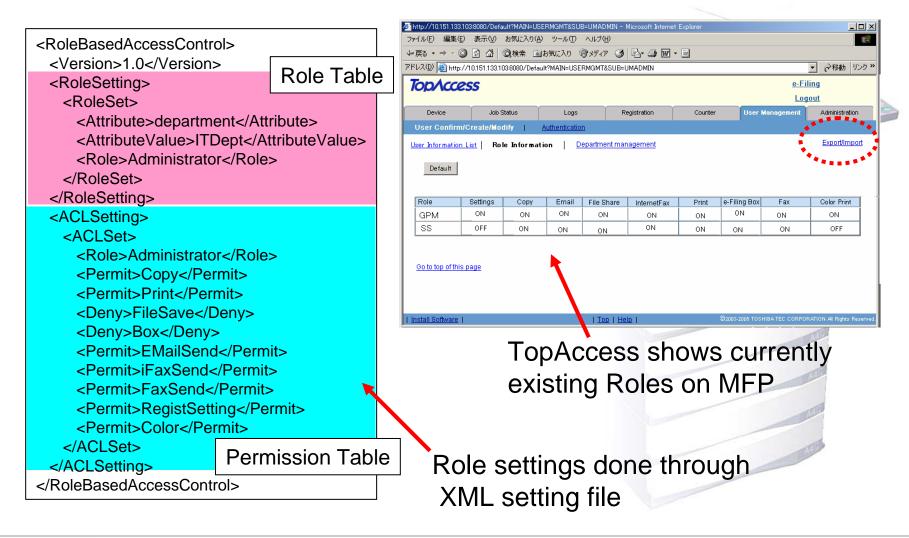
- server
- Reuse existing LDAP/AD attributes
  - Ex. department, title, company, office name
  - Map LDAP attributes to MFP Roles
- Benefits
  - Easy setup
    - No LDAP modification
  - Less LDAP updates
    - Role gets updated when default LDAP entries are updated Ex. Promotion
  - Customer specific LDAP entry can be used



## **RBAC** - Role Mapping

#### Set-up





# **TOSHIBA**Leading Innovation >>>



## Other changes



## IPv6 support

## Pv6 is supported as a new network protocol for the MFP



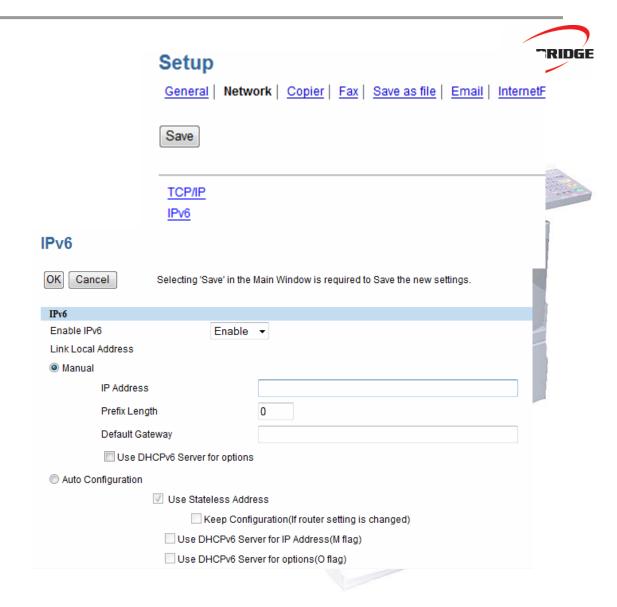
- 128-bit adresses instead of 32-bit addresses (IPv4)
- Enhanced security: IPSec standard (encrypted communication)
- The driver/utility software included in the Client Utilities CD supports IPv6 for Windows Vista
- Dual Stack IPv6/IPv4 implementation
- COur products have already been certified for IPv6 Ready Logo Phase 1



## IPv6 support

#### Avaiable for

- **⇒** LPR/LPD
- **⇒** FTP
- **⇒** HTTP
- **⇒** SMTP
- **⇒** POP
- **⇒** SNTP
- **⇒** Raw TCP Print
- **⇒** SNMP
- **⇒** SMB
- LDAP
- **DNS**

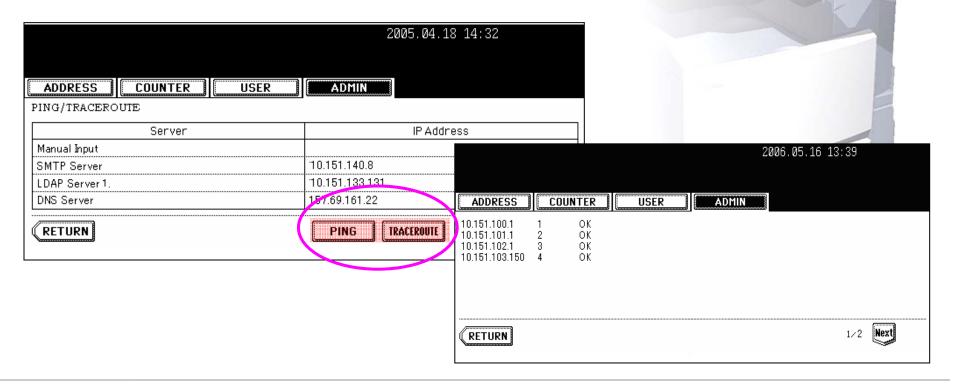


#### PING / Traceroute

## Network connectivity check to: LDAP server, mail server, etc (at machine set-up / network issue)



- Administrator and Service person can check the N/W connectivity by PING/ Traceroute
- Functions available at the MFP control panel



## New password input method

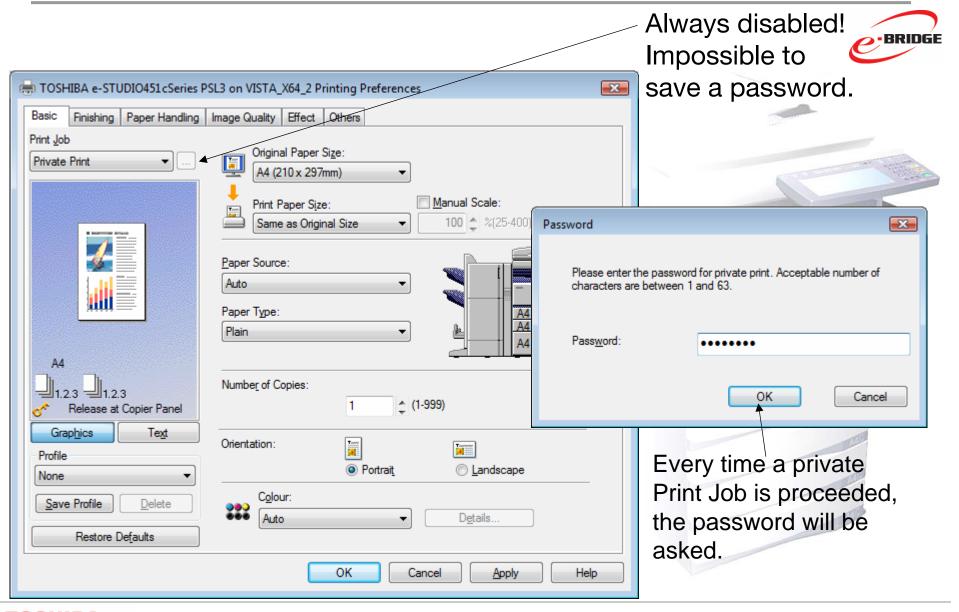
### No possibility for the password to be saved:



- Private Print
- Print with Access codes
- Print to Box
- Password input is required for each job
- Additional security
- Requirement for VISTA logo compatibility
  - > requirement (IMAGING-0025)



## Changing password input method

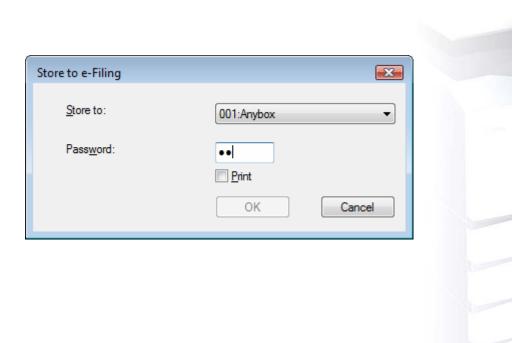


## Changing password input method

### Print to Box procedure.

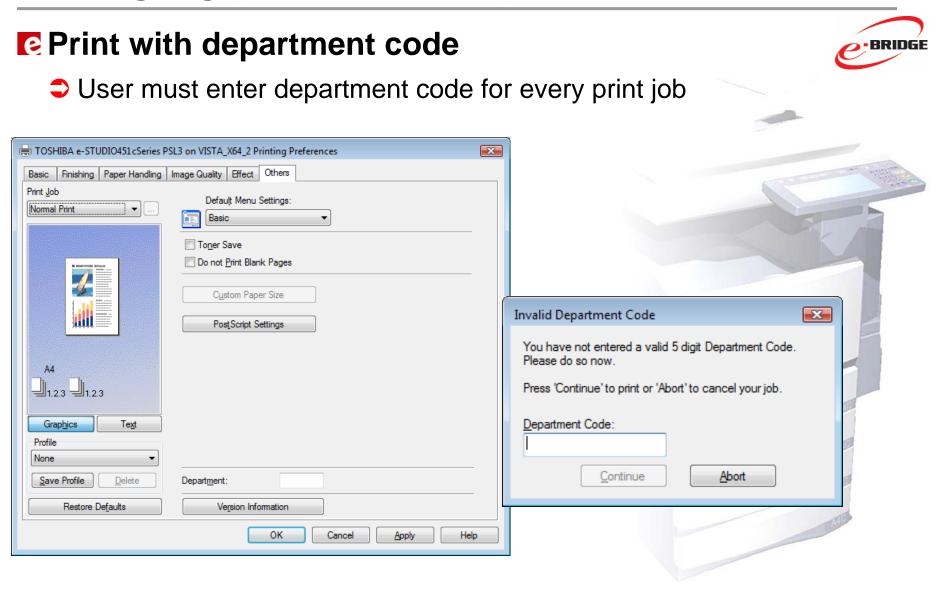


Impossible to store the password, as it was before





## Changing password input method



## **TOSHIBA**

### **Leading Innovation** >>>>



## End of part 1...





# **TOSHIBA**Leading Innovation >>>

e-BRIDGE

Part 2: e-BRIDGE ID-Gate



## e-BRIDGE ID-Gate - Concept

## Providing Contactless card readers for existing cards:

e-BRIDGE

- Mifare
- **⇒** HID

#### **©** Users advantages:

- Saving time at the MFP, using cards to authenticate
- Easy and Secure authentication
- System access control

#### Target:

- Tender business
- ⇒ Big companies, administrations
- Universities, schools



## e-BRIDGE ID-Gate - Concept

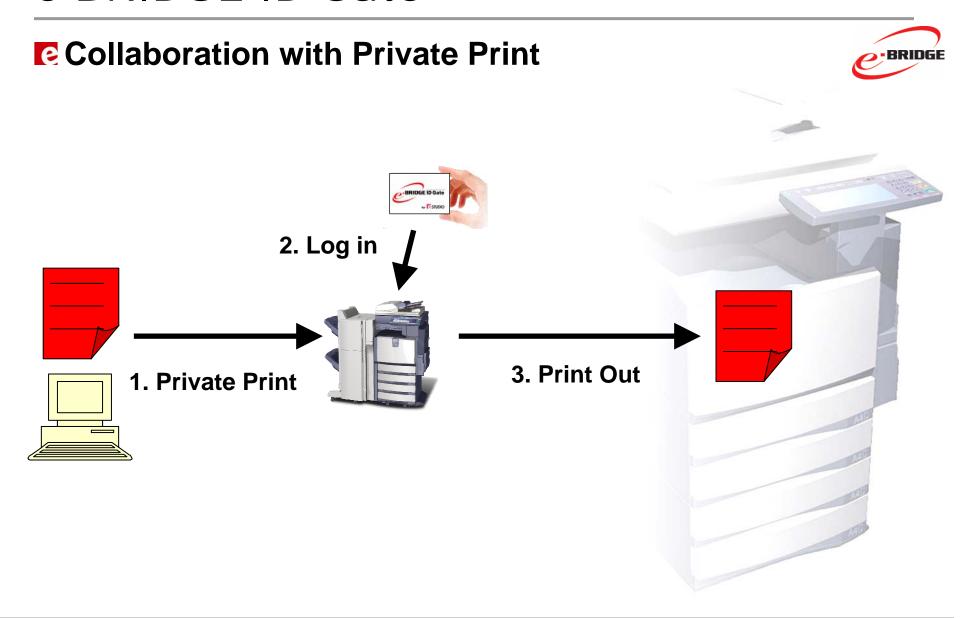
## e-BRIDGE ID-Gate is controlled by the e-BRIDGE controller



- Proprietary system able to handle e-BRIDGE functions:
  - Private print
  - File and Print
  - User/Department counter
  - Colour/B&W limitation
  - Coexistence with USER AUTHENTICATION
  - Role Based Access Control

&

- e-BRIDGE Fleet Management System
- Collaboration with e-BRIDGE advantages create sales opportunities



#### Collaboration with B&W / Colour limitations



Group	User	Colo	r imitation	B&W	limitation
Service		ON	100	ON	200
_	Α	ON	50	ON	100
	В	ON	60	ON	150
_	C	ON		ON	100
Planning		ON	201	OFF	
	D	ON	100	OFF	
	Е	ON	100	)FF	
	F	ON	150	FF	



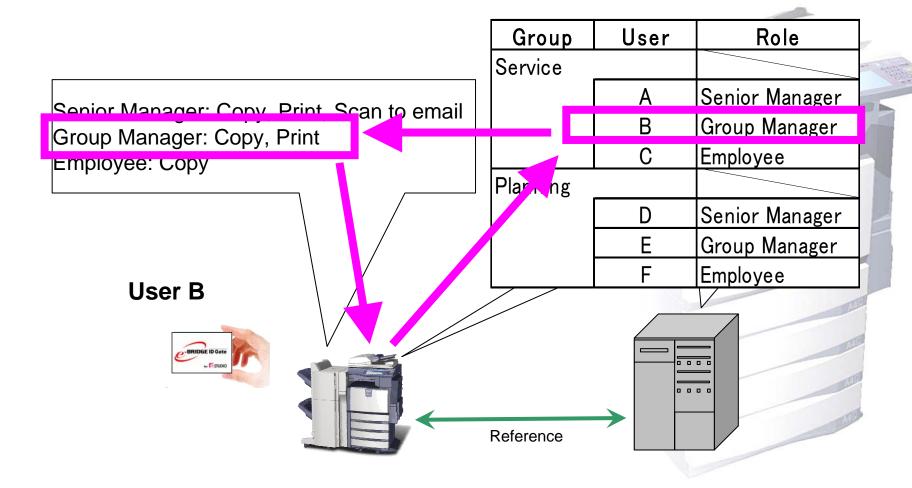






#### Collaboration with RBAC

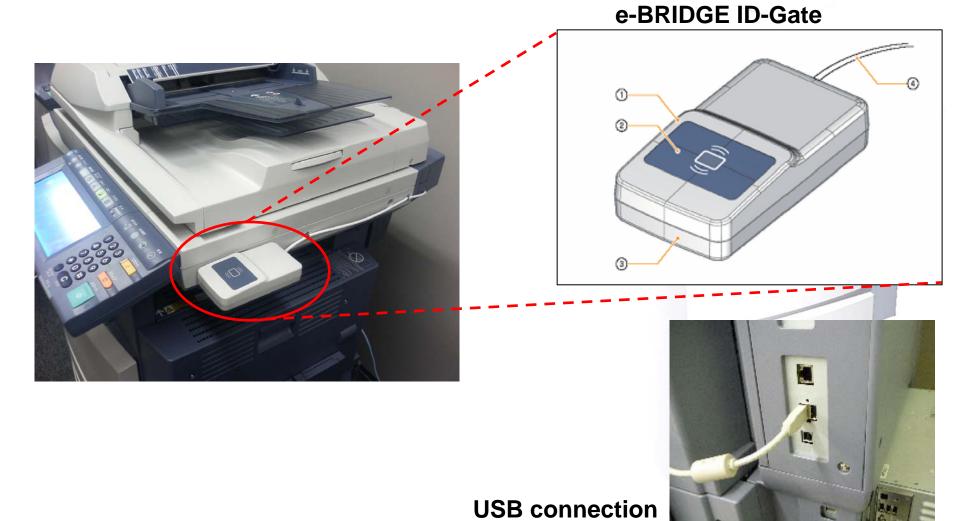




# Collaboration with e-BRIDGE Device Manager **Collect Group counter** •Color / B&W DV Paper size •Duplex / Simplex e-BRIDGE Device Manager

### **E** Appearance

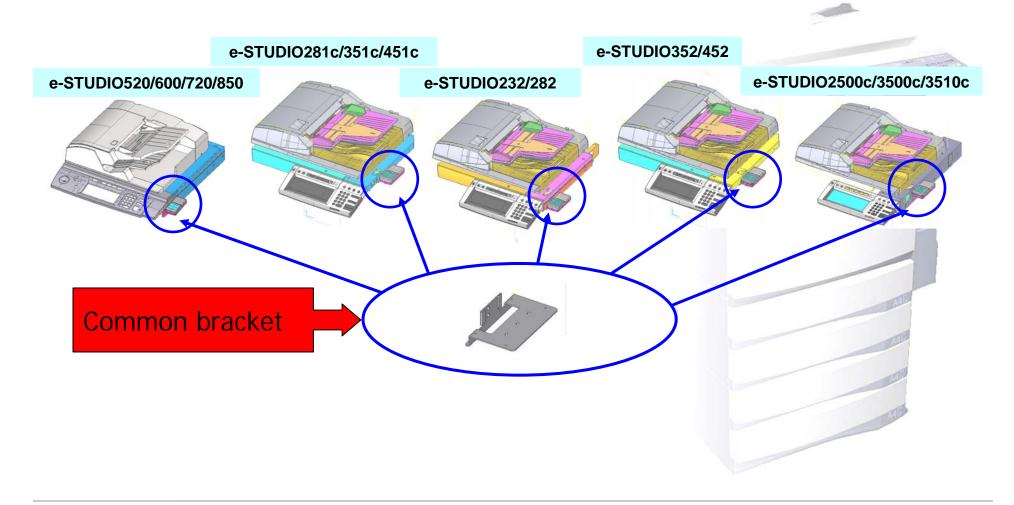




#### Attachment to e-BRIDGE models

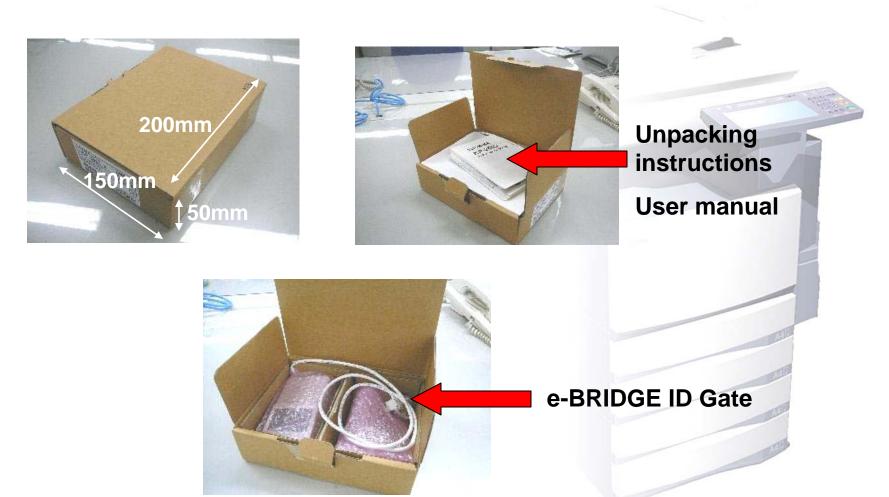


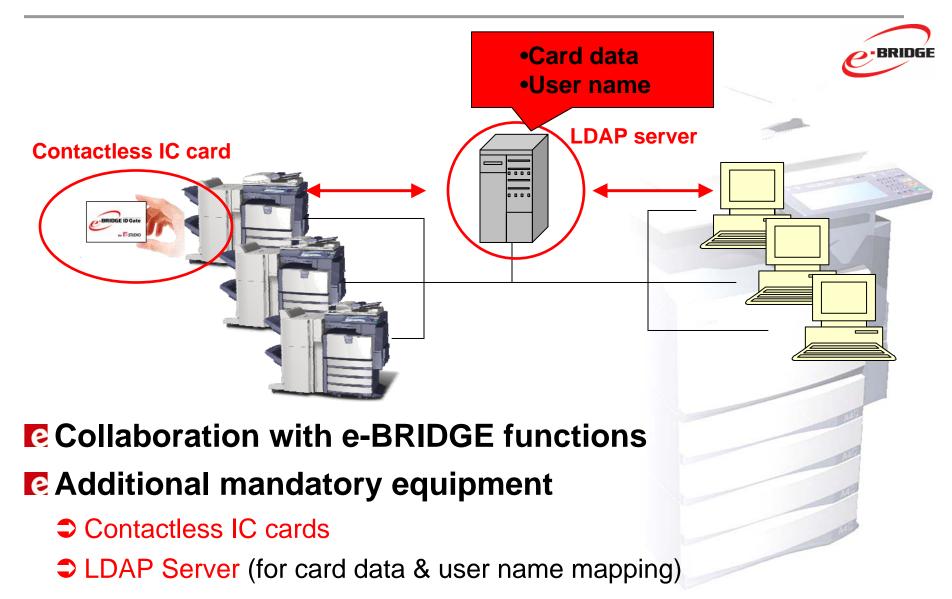
The installation location is the same among all models



#### **Packaging**









#### **EKP-2004**

Article Number Description

6A000000878 KP-2004 HID ID-GATE

6A000000925 KP-2005 MIFARE ID-GATE

- HID card reader
- Supported: HID iClass standard based proximity cards (ISO15693)
- Not supported: HID "Prox"

#### **EKP-2005**

- Mifare® card reader
- Supported: Mifare® Classic standard (1K/4K bytes)
- ⇒ Not supported: Mifare® Desfire and Mifare® Ultralight

#### **©** Supported e-STUDIO Models

- e-BRIDGE B&W and Colour Capable: e-BRIDGE v3.0 or higher
- ⇒ Full Colour: e-BRIDGE v3.1 or higher

#### Additional information:

e-BRIDGE

- Availability: Now
- e-BRIDGE ID-Gate will be included in your PriceList
  - Please contact your sales contact

- Providing only card readers:
  - Toshiba does not get involved in the Cards Selling/Programming
  - Requires a third part company (Integrator)

- Radio approval in EU and EFTA countries for both above options completed by TTEC
  - e-BRIDGE ID-Gate will not be available in all countries
  - Other countries need to get approved



## **Live Meeting Poll**

**Question 2** 

# Do you see some interest for these ID-Gate card readers in your market?

- Yes, we will sell a lot
- Yes, but in limited quantity
- Yes, but we are planning very few customer implementations
- No, this solution is not relevant on our market

Changes directly made to this slide will not be displayed in Live Meeting. Edit this slide by selecting Properties in the Live Meeting Presentation menu.

## **TOSHIBA**

#### **Leading Innovation** >>>>



## End of part 2...





### **TOSHIBA**

**Leading Innovation** >>>>



Part 3: e-BRIDGE 2 v3.1

e-STUDIO2500c/3500c/3510c



#### New firmware Availability

#### Firmware name: T380SY0\*310

- Available for download on WEB QS
- ⇒ Will be applied in Production in August 2007

⇒ Please refer to the BSI note: G07G066 (20/07/2007)





#### e-BRIDGE upgrade version 3.1

#### Many improvements:

- Windows Vista Support
  - > XPS support
  - ➤ WSD support
  - ➤ Premium Vista logo
- ⇒ IPv6 support
- Scan to Secure PDF
- ⇒ Improved performance of "Scan to Slim PDF"
- Improved Media Support (Changed bypass unit)
- ⇒ Noise reduction of Finisher (MJ-1101)



#### Vista support: XPS Printing

#### Same support as e-BRIDGE v3.0

- ⇒ Full 32/64-bit driver
- XPS Scan
- WS Print
- WS Scan

+

#### Full XPS printing support

- ⇒ XPS Printer driver
  - Network Printing
  - Direct USB printing



Premium Vista logo (with XPS path)



#### Additional features

#### **©** IPv6 support:

- Next generation of communication protocol for Internet traffic
- 128-bit adresses
  - To support the increasing number of Internet users
- Enhanced security
  - ➤ IPv6 assigns a Fix address to every device on Internet







#### Secure PDF

# Scan to Secure PDF: Create a protected PDF document

- Two passwords for the document
- Different level of encryption



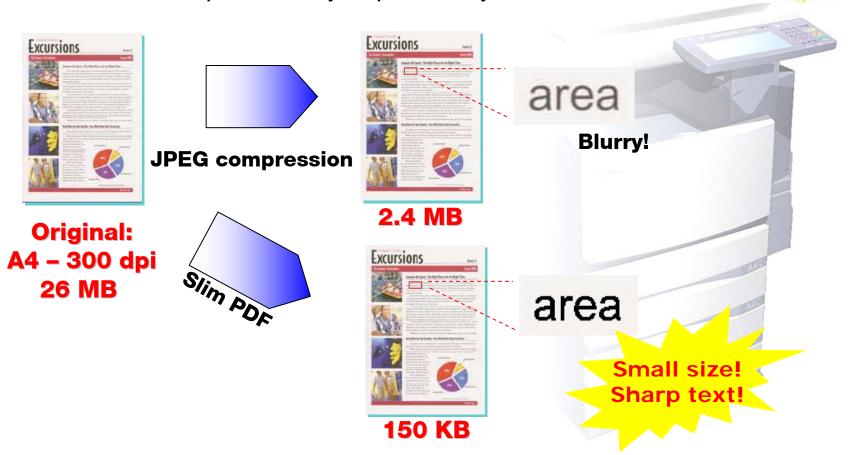
- Print protected document directly from a USB key
- Key-in the password to print the document on the MFP control panel



#### Scan to Slim PDF improvement

#### **©** Performance improvement:

- Scan data is created using a mix of hardware and software
- Scan to Slim PDF productivity improved by around 20%



#### Enhanced media handling

#### New bypass for enhanced specifications:

- SRA3 paper support (320 x 450 mm)
- ⇒ Up to 280 g/m² from bypass ("Thick 4")
- ⇒ Up to 256 g/m² from drawer 1&2
- ⇒ ADU now supports up to 256 g/m²
- ⇒ ADU now supports A3 wide (305 x 457 mm)

#### New function

- Banner printing
  - Support paper up to 305 x 1200 mm



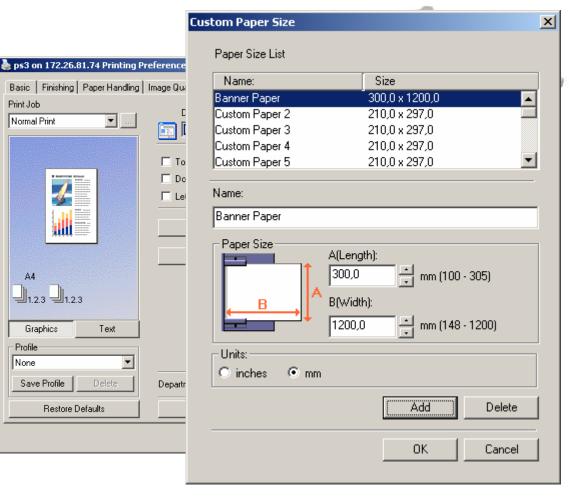
#### Banner printing - How does it work?

Create a custom paper size



Create a document with the same size

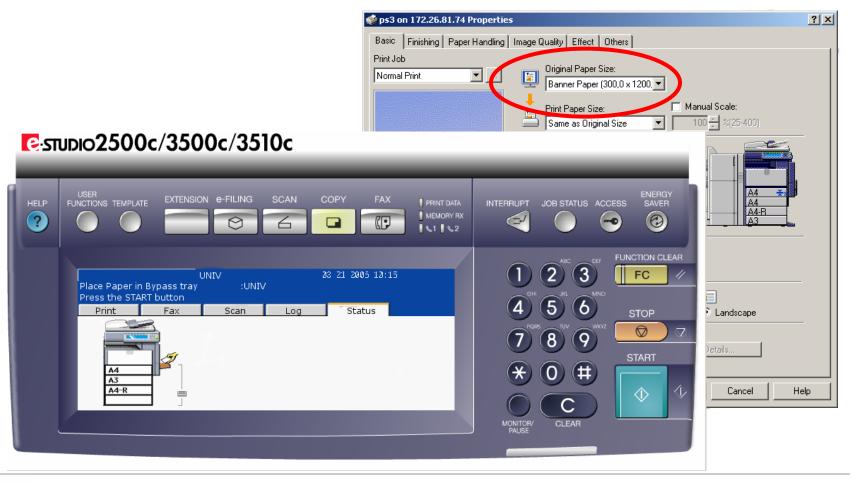




#### Banner printing - How does it work?

- Select the banner page format
- Put one sheet on the bypass tray

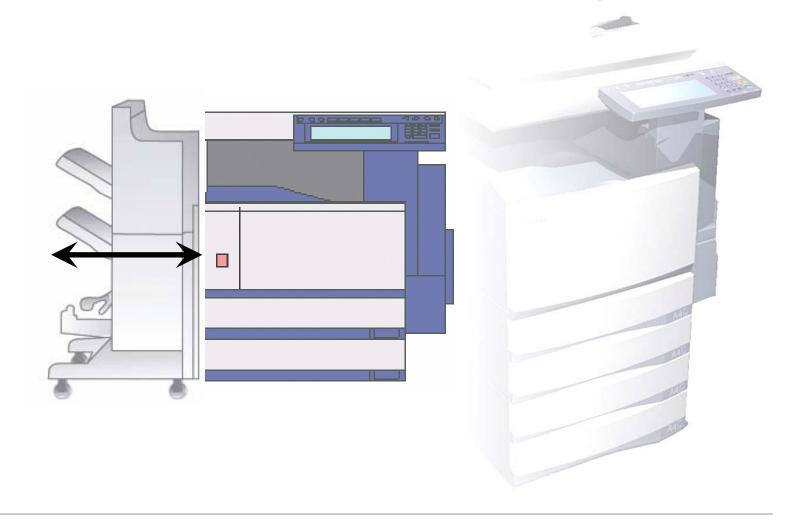




#### Banner printing – How does it work?

#### Important: Finisher must be disconnected





#### New Bypass

Stability improved

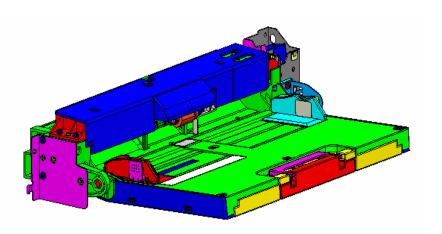
Side Guide width: 310 mm  $\rightarrow$  326 mm (for SRA3)

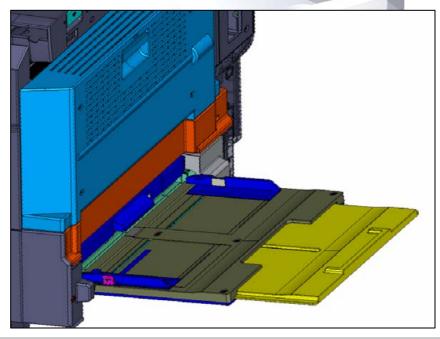
© Side Guide length: 80 mm→ 167.5 mm

Tray length: 378 mm → 430 mm (with expansion tray)

[ Improvement of operability by simple expansion tray

composition







#### New Bypass

# Applied to mass production from the following S/N (May 2007):

**⇒** e-STUDIO2500c: **CBE722185** 

**⇒** e-STUDIO3500c: **CCE715475** 

**e-STUDIO3510c: CVE713740** 

#### MIF upgrade via new bypass as Spare Part

- Announced in BSI note G07D773 (July 6th, 2007)
  - KIT-SRA3-380 (6LE39044000)

This part will be available until December 2007

Please refer to BSI note G07C744/GC07C745 (June 28th, 2007) for installation procedure

# Enhanced media are not yet available in GA-1210 printer driver (PRO version)



## **Live Meeting Poll**

#### **Question 3**

# What persentage of your Full Colour MIF do you plan to update with this new byoass a a spare part?

- 0%
- 1 to 5%
- 6 to 10%
- 11 to 25%
- 26 to 50%
- 51 to 80%
- 81 to 100%

Changes directly made to this slide will not be displayed in Live Meeting. Edit this slide by selecting Properties in the Live Meeting Presentation menu.

#### MJ-1101 noise improvement

#### Improvement of both Hardware and Firmware

- Hardware:
  - Reduction of Impact sound and resonant noise in high frequer domain
  - ➤ Production application March 2007 BSI Note: G097B669
  - Since S/N: MWC731337
- **Firmware:** 
  - Improvement of finisher movement control
  - Firmware v3.1
- Result:
  - > Reduction of sound pressure by 2 dB to 4 dB

	Sorting	Double Stapling
- Previous	61.9	61.0 dB(A)
- New	<b>58.1</b>	59.0 dB(A)

## **TOSHIBA**

#### **Leading Innovation** >>>>



# End of part 3...





# TOSHIBA

**Leading Innovation** >>>>