







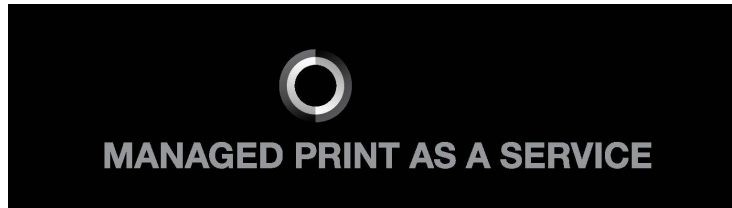






## How Toshiba “Encompass” Managed Print as a Service (MPaaS) Solves These Print Problems

Encompass is a unique MPaaS program architected to deliver comprehensive management and control of



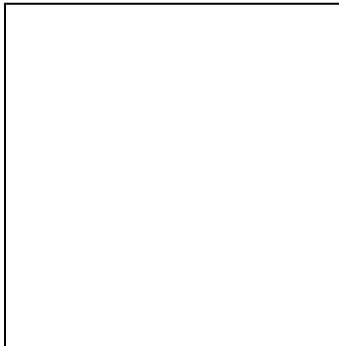
the organization’s entire print fleet and ecosystem. It utilizes a proven assessment process and methodology to evaluate the customer’s complete current state of their print ecosystem including all printers of all types, MFPs, copiers, etc. From this assessment the Encompass MPaaS establishes the true cost of that ecosystem. A plan is then put together that optimizes and right sizes the print fleet and ecosystem without requiring the print fleet to be replaced. Print management software including mobile apps, are instituted to reduce waste and control costs.

Encompass MPaaS is a highly automated service with several unique and innovative components. Each of these components are designed to solve the common print problems previously highlighted, both by themselves individually, and in combination. These components include:

- Encompass X
- Global Service Portal (GSP)
- PageSmart
- National Service Programs
- Green Edge
- Encompass MPaaS for Remote Workers

### Toshiba Encompass X

Encompass X is Toshiba’s onsite assessment and quoting software tool used by Toshiba’s business development teams to provide a customized report and plan to each prospective customer. The tool incorporates printer data collected from the various customer locations, a database of over 10,000 models of print equipment, a Six Sigma document output calculation, and Toshiba’s worldwide print experts print expertise. Print environment vulnerabilities are also uncovered via an extensive security assessment.



Encompass X then provides a current state of the print fleet and ecosystem while comparing it to an optimized state. The optimized state is right sized by eliminating print that no longer serves the organization. Optimization is modified by customer requirements that may not be optimal but are necessary. After all this is completed, a compelling cost effective MPaaS proposal is generated.

Toshiba then provides a complete project plan and implementation schedule based upon the agreement.

It’s important to note that Toshiba does not stipulate printers, MFPs, and copiers be replaced with Toshiba products to become a MPaaS customer. Toshiba has powerful alliances with both printer hardware manufacturers and third-party software providers. Hardware suppliers such as Brother, HP, and Lexmark



**Converting Print Problems into Optimized Print Productivity While Eliminating Persistent Print Aggravation**

and more. Third-party software providers for areas like output management and advanced scan/capture as well as those for document management and workflows.

**Encompass View**

Encompass View is an Online Cloud Portal that gives customers real-time access to information about their print ecosystem. That real-time information includes enormous tracking capabilities as seen in the chart below.

Global Service Portal (GSP)		
<b>Fleet data</b>	<b>Supply requests</b>	<b>Active/open service calls</b>
<b>Fleet change request</b>	<b>Supply shipping data</b>	<i>Verify data about each call</i>
<i>Remove decommissioned devices</i>	<i>View shipments by date range</i>	<i>View call details</i>
<i>Add new devices</i>	<i>Sort orders by device &amp; month</i>	<b>Place a service call by device online</b>
<i>Change existing devices</i>	<i>View details &amp; track shipments</i>	<i>Fill out &amp; submit online form</i>
<i>Relocate existing devices</i>	<b>Historical supply shipments</b>	<b>Service call history and details</b>
<b>Monthly page volume</b>	<i>View supply shipments over a specific timeline</i>	<i>View all calls within a specific timeframe</i>
<i>By fleet</i>	<i>Export data to an Excel spreadsheet</i>	<i>Breakdown calls by device</i>
<i>By individual printers</i>	<b>Online service call requests</b>	<i>View call details</i>
<i>Color prints to black and white</i>	<b>Submit fleet change (IMAC) requests</b>	<i>Export data to an Excel spreadsheet</i>

GSP enables customers to have timely information about the entire print ecosystem and individual printers. Because when customers do not have that information, or it is inaccessible, serious problems can and do occur.

**Toshiba PageSmart**

The public cloud has changed how IT organizations pay for service expectations. The cloud model charges for what is actually used or consumed instead of paying for what could be used or consumed. This is also known as the “utility” model. Toshiba’s MPaaS Page Smart is based on that utility model. The Toshiba MPaaS customer only pays for what’s used. Toshiba offers a full range of options here for copy, print, and scan systems.





## Converting Print Problems into Optimized Print Productivity While Eliminating Persistent Print Aggravation

It starts with a blended cost per page (CPP) model. This payment model delivers cost certainty. The cost of monochrome print is significantly less than color. This leads many IT organizations to try to limit color print through organizational policies even though there is an increase in print projects calling for color. It's very difficult to enforce these policies. That leads to a lot of cost uncertainty each year. The PageSmart CPP blended cost model provides cost certainty for the defined contract time period. Toshiba also works with and offers other third-party software output management partners for tracking and enforcement of print policies. This all part of Toshiba's comprehensive Encompass MPaaS portfolio.

PageSmart cures several other uncertainties. Take the print consumable issues. Instead of pre-buying supplies or racing to buy them when they run out, PageSmart is aware of when toner is running low. It also knows the consumption rate and delivery timeframes. Based on those factors, PageSmart provides that toner before it runs out. But not too far in advance. In other words, Toshiba Encompass MPaaS PageSmart provides just-in-time supplies to 99% of the population via ground shipping.

PageSmart is a flexible program. It has a full range of options customizable based on the needs and requirements of the customer. There are generally three primary PageSmart options. They're compared in the matrix below.

	PageSmart		
	Express	ABC	Direct
<b>Simplified Flat Rate CPP</b>	√	√	√
<b>Toner (OEM or Compatible Options)</b>	√	√	√
<b>Mono &amp; Color Pricing Options</b>	√	√	√
<b>Automated Meter Reading</b>	√	√	√
<b>Customer E-commerce Site</b>	√	√	√
<b>Automated Toner Monitoring</b>	√	√	√
<b>Automated Toner Replenishment</b>	√	√	√
<b>Toshiba Gold Desk Support</b>		√	√
<b>National On-Site Service</b>		√	√
<b>Repair Parts</b>		√	√
<b>Consumable Parts (Maint Kits)</b>		√	√

### Toshiba National Service Programs

Encompass is supported by Toshiba's nationwide support network with over 100 direct and more than 500 partner service locations throughout the USA. It's supplemented by third-party service partnerships for those areas not covered directly by Toshiba and its partners.



Another part of Toshiba's Encompass National Service Programs is the national service dispatch with InTouch network support.

Toshiba MPaaS service billing is quite flexible. There are national CPP rates, time and material per incident rates for printers, and can include thermal as well as barcode printers.

### Toshiba's Green Edge

Toshiba's Encompass MPaaS has a major green edge over any other MPaaS or Managed Print Service (MPS). From printer device performance optimization that reduces power and toner consumption, toner recycling, and green manufacturing to a Toshiba tree planting service called "PrintReleaf".

PrintReleaf is a certification system and software platform for automated global reforestation. The number of trees consumed are calculated based on each Toshiba Encompass MPaaS customer's paper consumption over time. That paper footprint consumption is automatically replanted. The customer gets to choose where those trees are replanted at any or all of eight locations including Brazil, Canada, India, Ireland, Madagascar, Mexico, and the USA. And



## **Converting Print Problems into Optimized Print Productivity While Eliminating Persistent Print Aggravation**

they can download a pdf impact report anytime. PrintReleaf essentially provides a paper neutral impact. But with recycled paper that outcome becomes net positive.

The Toshiba Encompass MPaaS Green Edge completely changes the game when it comes to environmental/climate print impact. Instead of being massively negative, Encompass MPaaS neutralizes or even reverses that impact.

### **Toshiba Encompass MPaaS for Remote Workers**

WFH has generally not been part of managed print services or MPaaS. The numbers were too small or not relevant. COVID-19 changed that market, and Toshiba Encompass MPaaS adapted to it. Toshiba studied the market, customer requirements, and the most cost-effective way to meet those needs. The result is the Toshiba's incredibly easy comprehensive Encompass WFH MPaaS.

Encompass MPaaS for Remote Workers is designed to completely address all of the WFH print problems. To provide remote worker printer support demands printers that can be reliably remotely monitored, updated/patched, troubleshot, exchanged without sending a technician, and most importantly, secured. The key word in that sentence is "reliably." Most networked MFPs and printers have cheap networking chips. It's why many home printers are constantly disconnecting from the WiFi or Ethernet networks. Some are well-known for corrupting networks or easily letting the unauthorized access.

Toshiba initially selected five supported MFPs for the Encompass MPaaS for Remote Workers program that meet these requirements. There will be others over time.

Each of these MFPs can be reliably remotely monitored, updated/patched, troubleshot, exchanged, and secured. All units come with a starter cartridge and a 36-month supply of toner, based on 250 pages per month monochrome and 100 color. The Encompass MPaaS for Remote Workers program requires the use of genuine OEM toner cartridges or service warranties will be void. HP models FM Audit fleet monitoring tool also has to be installed at the customer's corporate office before implemented at the remote/home office.

All MFPs in the Remote Workers Program include a 3-year Advanced Exchange that requires no onsite personnel. When service-related issues arise, a call is placed to a provided 800 number of the MFP manufacturer. The issue is then remotely diagnosed. If the call is unable to resolve the service-related issue a replacement MFP is shipped the next business day. The remote worker installs the replacement MFP. Then returns the defective MFP in the box the replacement arrived in. A pre-printed shipping label is provided to return the defective unit. All shipping costs are included in the Encompass MPaaS for Remote Workers pricing. Toshiba notes that only the MFP itself is replaced. The remote worker retains all paper trays, toner cartridges and other options before sending back the faulty MFP.

Encompass MPaaS for Remote Workers also provides an optional user-based security and print tracking with the use of "PaperCut Pocket" software. PaperCut Pocket empowers print from any printer without user expertise or fuss. The PaperCut Pocket apps runs on the remote laptop, workstation, or a mobile device. These apps release the print job. Alternatively, PaperCut Pocket has an app installable on the MFP itself. This app tracks both copying and scanning and the release of the print jobs from the MFP. PaperCut Pocket requires a minimum of 25 users divided between remote users and the primary office. The software is very easy to administer because of its cloud native and intuitive architecture.

What about the security? That's a key reason for specifying specific MFPs for the remote workers program. These MFPs make it much more difficult for external or internal malicious actors from compromising MFP security as seen in the table below.





<b>Device Security</b>	HDD data encryption configurable	Encrypted HDD optional	HDD data encryption configurable
	Firmware digitally signed	Firmware digitally signed & white listed	Firmware digitally signed
<b>Network Access Security</b>	Latest network protocols support: HTTPS, TLS for wired, & WiFi	Latest network protocols support: HTTPS, TLS for wired, & WiFi	Latest network protocols support: HTTPS, TLS for wired, & WiFi
	MACID/Port filtering	MACID/Port filtering	MACID/Port filtering
	Security certificate management	Security certificate management	Security certificate management
<b>Data &amp; Document Security</b>	PDF Encryption	PDF Encryption	PDF Encryption
	Password management	Email Audit log	Password management
	Audit log	Audit log	Audit log
<b>Policy-based Monitoring</b>	Automatic firmware update	Automatic firmware update	Automatic firmware update
		Policy-based security settings mgmt via HP security mgr.	

### Summary and Conclusion

Print is a problem for the vast majority of IT organizations. There are six very persistent common print problems. Those problems are non-trivial. Ranging from

- Under the radar print sprawl and lack of control within most organizations.
- Much greater upfront and ongoing operational costs than tracked or expected.
- Malware and data breach print attack vector.
- Pervasive user printer complaints.
- Toner or ink runs out at the worst possible time per Murphy’s law.
- Extensive negative print environmental/climate impact.
- Massive increase in ‘Work-from-Home’ that exacerbates print management and cost issues.

Toshiba Encompass MPaaS is the first managed service architected to make them non-events by mitigating or eliminating each and every one of them. IT organizations that need or want control of their print ecosystem, printer fleet, printer security, and print costs should take an in-depth long look at Toshiba Encompass MPaaS.

### For More Information on the Toshiba Managed Print as a Service

Go to: [Toshiba MPaaS](#)

Paper sponsored by Toshiba America Business Solutions. **About DSC:** Marc Staimer, as President and CDS of the 23-year-old Dragon Slayer Consulting in Beaverton, OR, is well known for his in-depth and keen understanding of user problems, especially with storage, networking, applications, cloud services, data protection, and virtualization. Marc has published thousands of technology articles and tips from the user perspective for internationally renowned online trades including many of TechTarget’s Searchxxx.com websites and Network Computing and GigaOM. Marc has additionally delivered hundreds of white papers, webinars, and seminars to many well-known industry giants such as: Brocade, Cisco, DELL, EMC, Emulex (Avago), HDS, HPE, LSI (Avago), Mellanox, NEC, NetApp, Oracle, QLogic, SanDisk, and Western Digital. He has additionally provided similar services to smaller, less well-known vendors/startups including: Asigra, BrainChip, Cloudtenna, Clustrix, ConduSiv, DH2i, Diablo, FalconStor, Gridstore, ioFABRIC, Nexenta, Neuxpower, NetEx, NoviFlow, Pavilion Data, Permabit, Qumulo, SBDS, StorONE, Tegile, and many more. His speaking engagements are always well attended, often standing room only, because of the pragmatic, immediately useful information provided. Marc can be reached at [marcstaimer@me.com](mailto:marcstaimer@me.com), (503)-312-2167, in Beaverton OR, 97007.

