

Plus Technologies is a developer and marketer of Advanced Print Spooling Software Solutions since 1995. They have thousands of customers in over 35 countries around the world.

**PLUS TECHNOLOGIES WHITE  
PAPER SERIES**

*This series of white papers will discuss the advantages of modern document delivery/administration methods over the old traditional print job methods.*

*Utilizing modern document delivery methods, print jobs or applicable parts of the jobs can be delivered to the correct locations, people, web sites, faxes, emails or printers. Modern document delivery methods provide user-friendly interfaces that assist getting jobs where they need to be, when they need to be there.*

*This technology saves time, network resources, consumables and training. If there is problem along the way, it can be tracked down to a place, time, printer and page so it can be resolved quickly. This technology provides confirmation of job delivery and more importantly job completion.*

*Where appropriate jobs can also be encrypted which ensures security of the information.*

## Unplanned Downtime Solution

The customer associated with this white paper is a large Midwestern Health Care Provider comprised of a network of 8 healthcare facilities, 15 affiliates and a 200-member primary care physician network. This health care provider operates in multiple states and provides services to more than 1.5 million people in the communities it serves.

**Business Problem** – A centralized patient information system from IDX, running on a Tandem system, provides online access to patient care orders, medication information, dietary needs etc. for the patient care providers at multiple facilities.

If a system or network problem occurs, access to the online system may not be possible. In this circumstance, care providers would not be able to maintain the standard of care required for their patients. These outages, although infrequent, necessitated a solution to maintain desired levels of patient care.

**Key Technical Challenge** – Access to patient information is very critical to continued patient care. A solution is required that allows health care providers uninterrupted access to the patient care information, even if the network or central online system is down. Alternatives to provide this level of fail-safe access were evaluated and found to be either architecturally unfeasible or too expensive

The documents, with data no more than four (4) hours old, that need to be viewable even in a system or network down condition include:

- Physician Routing
- Medication Administration Guide
- Current Active Orders Profile
- Ancillary Worksheets
  - Cardiology
  - Dietary
  - Physical Therapy
  - Respiratory

PLUS TECHNOLOGIES WHITE  
PAPER SERIES

*This series of white papers addresses common customer problems associated with print spooling, printer management and advanced document delivery.*

*If you have a topic that you would like Plus Technologies to consider for a white paper, please e-mail us at [contactus@plustechnologies.com](mailto:contactus@plustechnologies.com)*

**PREVIOUS WHITE PAPERS**

*View previous white papers on our web site at [www.plustechnologies.com](http://www.plustechnologies.com) in the Solutions Section*

**Previous Topics**

***Streamlining Multi-Host Printing***

***Job Splitting and Load Balancing***

***OM Plus*** is Plus Technologies' highly reliable, easy to use, Advanced Print Spooling, Printer Management and Document Delivery software solution.

***OM Plus*** provides advanced print spooling, and delivery and control of documents across complex network environments to multiple destination types including printers, fax, email, and web/intranet sites.

## Technical Environment

- Centralized Patient Information system from IDX running on a Tandem system
- Remote facilities accessing the IDX system via WAN
- See diagram

## Technical Solution

Plus Technologies implemented a document auto archive and retrieval system based on OM Plus Server. The central site has an OM Plus server running as does each remote site (see diagram).

The IDX system was setup to print the critical documents to "virtual" OM Plus printers every 4 hours. No other changes were needed to the IDX patient information system.

The central OM Plus server recognizes the document type and adds unit number and document type information to the document's title to make future lookup of the document quick and intuitive. Then, the document is routed to the appropriate remote facility's OM Plus server where it is archived for 48 hours.

Medical staff personnel can search for and retrieve any critical document at the remote site, even if the network is down. Documents can be printed on the local network printers or on the remote OM Plus server's parallel-attached printer if the remote location's network is down.

## Implementation

Installing, configuring and testing were completed in a matter of a few days. Plus Technologies engineers were on-site to assist the customer with installation of the additional OM Plus software at the remote locations and to provide configuration assistance with the setup of archive document recognition and the associated routing to the remote systems.

## Other Features

- The customer had previously installed OM Plus in their Central location and gained access to all the other features of OM Plus designed to help them control and manage their enterprise wide print jobs and printers.
- These features streamline operations and reduce costs related to administration and support and include:
  - Allows central control and monitoring of the status of printer devices and jobs across the entire organization from a single status screen improving help desk productivity.
  - Provides a central print management system regardless of what type of system created the document (mainframe, UNIX, Windows, Tandem, etc.) reducing cost and complexity of enterprise print architecture
  - Ensures delivery of output to its final destination in the correct format.
  - Greatly reduce help desk calls and maximizes printer availability.

## **Results**

- Economical, fail-safe system available to continue patient care even if the online system is unavailable
- Patient Care standards not compromised during system/network downtime
- Leverage of existing investment in OM Plus to manage enterprise-wide production document

## **Customer Quote**

*"Your engineer was a tremendous help to us during the weekend we installed the Unplanned Downtime Solution. After getting the archive solution installed and running, he provided the necessary support ... Again, thanks to your engineer's added support, we had an uneventful go-live."*

-Director, Information Technology

## **Plus Technologies White Papers**

The Plus Technologies white paper series includes real examples of how companies use Advanced Spooling Solutions to streamline operations, reduce cost and/or add functionality to existing business processes. For more information on these white papers, contact Plus Technologies.

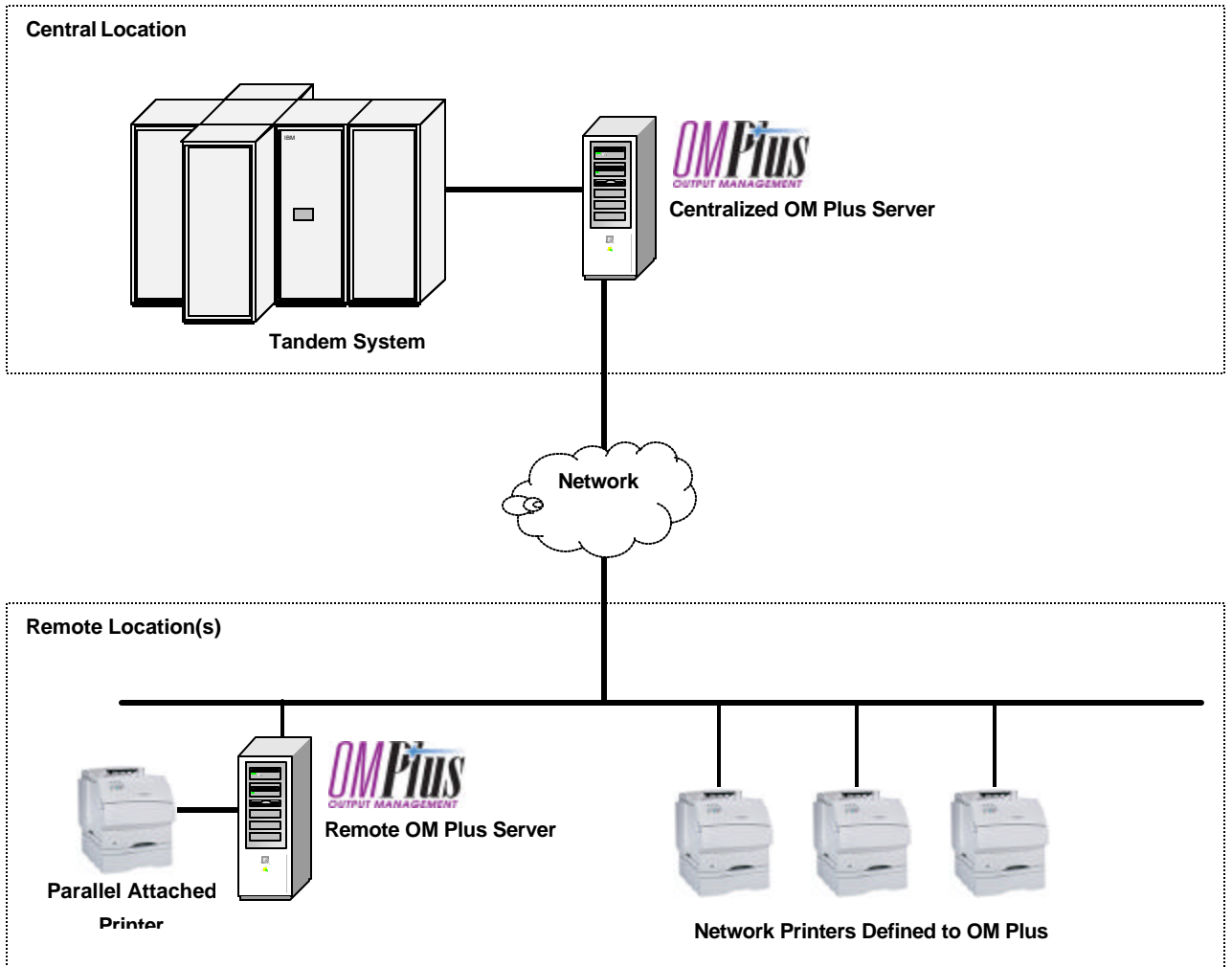
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**Workflow Notes:**

1. IDX CareCast System Central Location (Tandem)
  - a. Setup to print critical documents to a virtual OM Plus destination defined on the Central OM Plus Server every four (4) hours.
  - b. No other application changes are required.
2. OM Plus Server in Central Location
  - a. OM Plus recognizes the jobs coming to the virtual printer as the critical documents requiring remote processing
  - b. Optional OM Plus features, CD Plus and RD Plus, recognize document type and add "unit number" and "document type" to the title field. This makes subsequent look-ups simpler and more intuitive.
  - c. OM Plus automatically routes the documents to the appropriate remote OM Plus Server
3. OM Plus Servers at the Remote Facilities
  - a. OM Plus at each facility receives the jobs from Central and automatically archives them.
  - b. The documents will remain in the archive for 48 hours then will be automatically purged.
  - c. While in the OM Plus Archive System, documents can be searched for and retrieved by referencing title and unit number.