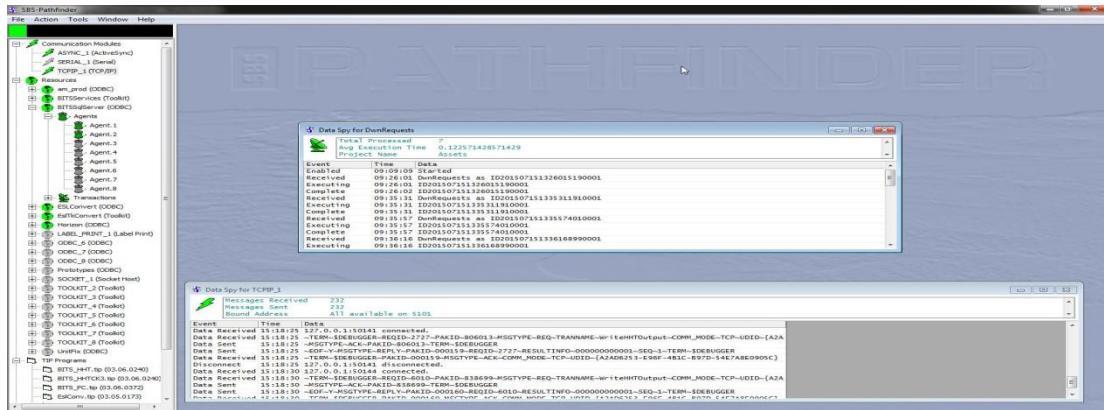


# SBS-Pathfinder White Paper

SBS-Pathfinder Enterprise Transaction Server, is a true enterprise-grade, cross-vendor solution that enables IT administrators to rapidly install and easily manage wired and/or wireless terminals simultaneously, including multi-site wireless LAN and WAN implementations. SBS-Pathfinder greatly reduces the data collection enterprise total cost of ownership and leverages existing LAN infrastructure, maximizing network resources to integrate transactional data into any enterprise system. When using the CASE Tools product for rapid application development, Pathfinder will increase uptime while allowing IT managers to easily create, configure and administer transactions, which feed various in-house systems.



## Pathfinder Capabilities

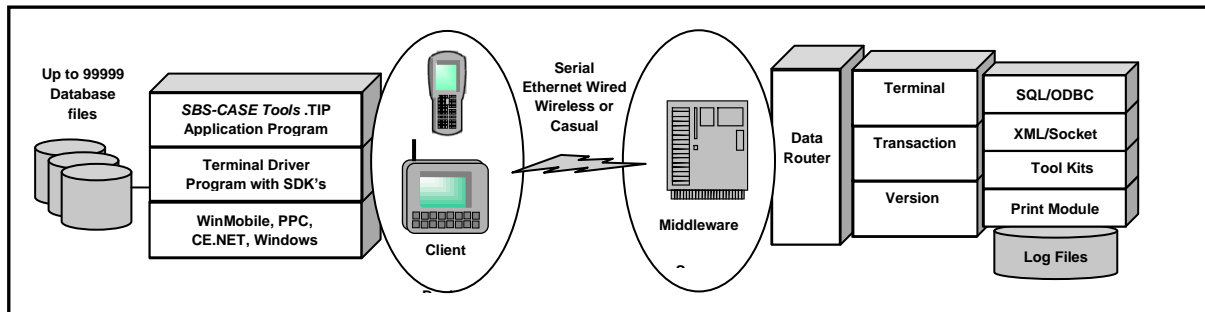
- Rapidly deploy enterprise-wide data collection terminals
- Centrally manage and deploy terminal programs using version control
- Integrate with existing enterprise systems
- Maintain date and time syncing with all terminals
- Easily perform ongoing maintenance
- View and analyze all transactional events and log files through Log Explorer™
- Maintain FIFO within priority for all transactional data
- Queuing of data for mission critical transactions
- Add-on Resource concept to support small or large enterprises
- Multiple concurrent Resource Agents to support high transaction volumes and long running tasks
- Snap-on GUI to allow monitoring of all, or one activity

Pathfinder Enterprise Transaction Server is a many-to-many solution bringing data collection from many devices to many host applications or servers. Transactions can be setup for:

Transaction	
Transaction Name:	getCsvData
Priority (1 = Highest):	5 (Default Priority)
Result Type:	No Result
File Information	
Destination File:	
Specify Max Rows:	Maximum Rows: 0

- One-way with no results
- One-way with execution confirmation
- Single return result
- Multiple return results

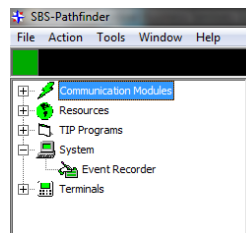
- Queuing to handle out-of-range or enterprise resource unavailable Resources



SBS-Pathfinder can be installed as a standard Windows application or as a Windows Service, making it easier to deploy to your datacenter. The application provides a graphical user interface to the system, and is the primary means for SBS-Pathfinder setup, configuration, activity viewing and monitoring.

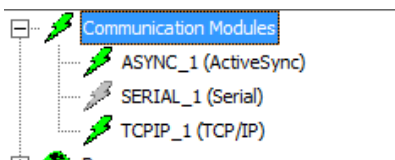
SBS-Pathfinder Enterprise Transaction Server has been designed to work alongside our rapid application development product, SBS-CASE Tools, or .NET Component to give you state-of-the-art design capabilities towards creating, building and testing any type of business function necessary for your enterprise system.

We have expended a great deal of effort in the development of SBS-Pathfinder to insure the highest level of stability, reliability and use of modern object-oriented programming techniques to give you a winning platform for automation success. As a result, SBS-Pathfinder sets up your data collection environment as a hierarchical, object model:



- Communication Modules
- Virtual Terminal Manager
- Transaction Manager
- Resources (with Agents)

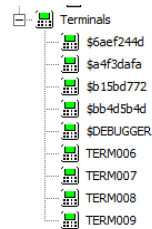
## Communications Modules



The Communications Module group allows you to configure the communications channels used to connect to your mobile devices. These include TCP/IP for wired or wireless devices, USB ActiveSync and Serial (RS-232) for locally docked devices. This group also enables you to monitor system activity, through a series

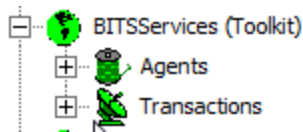
of spy windows.

## Virtual Terminal Manager



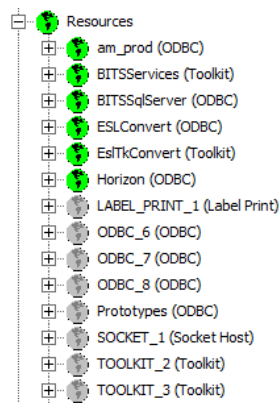
The Virtual Terminal Manager maps the mobile devices that are utilizing the system to Virtual Terminals, which log and display their activity and provide terminal services such as Date/Time syncing, bi-directional data and binary file transfer, and Version Controlled program updates. The number of Virtual Terminals is dependent on the number of seats purchased. The Virtual Terminal Manager also handles the Auto-configuration feature which allows mobile devices to be deployed without configuring or reconfiguring the server, as long as there are unused licensed seats available.

## Transaction Manager



The Transaction Manager is where transactional data is cooked with the transaction definitions. The transaction definition defines how data is delivered and to what Resource it is delivered to. For example, if a transaction was destined for an ODBC Resource, the Transaction Manager will parse the live data into the SQL commands that were previously defined in the SBS-CASE Tools design module.

## Resources



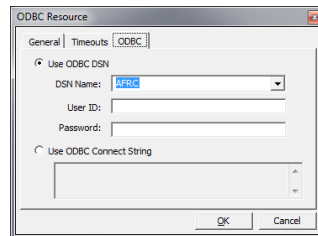
A Resource represents a destination for your mobile data within your Enterprise, such as a Database, Legacy System, or a purpose-built program. By defining a common abstraction or model for these data endpoints, Resources allow applications authored in SBS-CASE Tools to be independent of the system that consumes their data. Each Resource has one or more Agents associated with it that perform the task of dialoging with the enterprise data endpoint. They are designed to service the next available terminal transaction (FIFO within priority) as they become available, minimizing bottlenecks in your enterprise collection. For resources that support performing concurrent tasks, multiple Agents can be utilized to allow a larger throughput. Transaction definitions can be moved between compatible Resources and the

number of Agents servicing that resource can be configured (1 to 8) to allow the system to be tuned to meet your specific requirements and achieve optimum load balancing. For example, if a mobile device ties up one Agent with a lengthy database process, other Agents remain available to work for other terminals – eliminating potential bottlenecks. Various spy windows are available for viewing activity at the Resource, Agent and Transaction levels.

The following resource types are included with Pathfinder

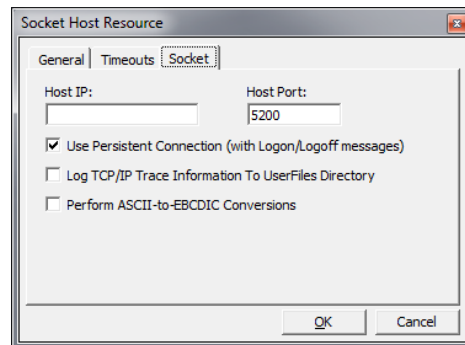
- SQL/ODBC Resource
- XML Host Socket Resource
- Label Print Resource
- Toolkit Resource

### SQL/ODBC Resource



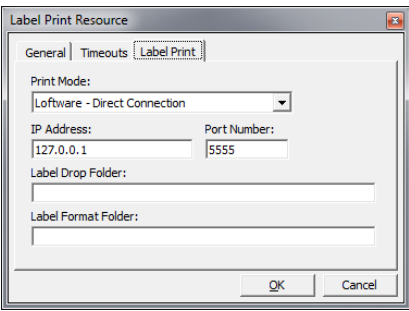
The SQL/ODBC Resource provides access to databases using any configured level 2 compliant ODBC driver. Each SQL/ODBC Resource is configured with a DSN (Data Source Name), and each associated Agent can open its own database connection. If required, multiple SQL/ODBC Resources can utilize the same DSN.

### XML Host Socket Resource



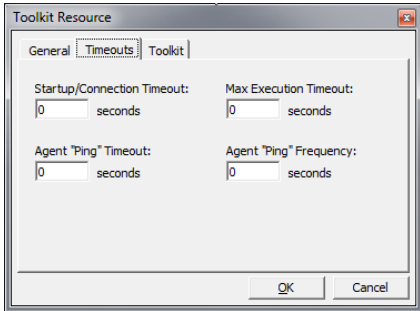
The XML Host Socket Resource utilizes one or more TCP/IP client socket connections to any given Host program or system. The data will be exchanged using anXML format. The Host can be implemented in almost any programming language or any environment. From C++ applications on Windows to Java applications on Linux, even Cobol or RPG programs on Mainframes can be made accessible to your data collection system.

### Label Print Resource



The Label Print Resource provides an interface to the Loftware LPS2000 Label Print Server product as well as the Seagull by Bartender product. Label Print Requests sent by a mobile device are routed to the vendors Label Print Server, which in turn handles the label printing to any network-attached (wired or wireless) printer in your enterprise.

**Toolkit Resource**



The Toolkit Resource provides an API to extend SBS-Pathfinder with your own custom code. Developers can utilize any programming language that supports Microsoft's COM standard, including C++, Visual Basic, VB.NET, C#, and more. Custom application interfaces can then be created to feed any enterprise system.

**Logging**

Request ID	Tran name	Terminal name	Date / Time	Row Type	Data	Result Type
1	1D201507311807492350001	DwnLocatlon	7/13/2015 2:07:49 PM	Request	select	FILE
2			7/13/2015 2:07:49 PM	Response	33 washington	... N / A
3			7/13/2015 2:07:49 PM	Response	CA	... N / A
4			7/13/2015 2:07:49 PM	Response	Mount Laurel	... N / A
5			7/13/2015 2:07:49 PM	Response	penn Plaza	... N / A
6			7/13/2015 2:07:49 PM	Response	PY	... N / A
7			7/13/2015 2:07:49 PM	Response	Trenton	... N / A
8			7/13/2015 2:07:49 PM	Response	wait	... N / A
9	1D201507311807542490001	valuserId	7/13/2015 2:07:54 PM	Request	select user_id	SINGLE
10			7/13/2015 2:07:54 PM	Response	SE	N / A
11	1D201507311807547910001	DwnLocatlon	7/13/2015 2:07:54 PM	Request	select	FILE
12			7/13/2015 2:07:54 PM	Response	33 washington	... N / A
13			7/13/2015 2:07:54 PM	Response	CA	... N / A
14			7/13/2015 2:07:54 PM	Response	Mount Laurel	... N / A
15			7/13/2015 2:07:54 PM	Response	penn Plaza	... N / A
16			7/13/2015 2:07:54 PM	Response	PY	... N / A
17			7/13/2015 2:07:54 PM	Response	Trenton	... N / A
18			7/13/2015 2:07:54 PM	Response	wait	... N / A
19	1D201507311807553200001	DwnLocnFloor	7/13/2015 2:07:55 PM	Request	select distinct location	FILE
20			7/13/2015 2:07:55 PM	Response	BS	F... N / A
21			7/13/2015 2:07:55 PM	Response	DC	F... N / A
22			7/13/2015 2:07:55 PM	Response	Del1	F... N / A
23			7/13/2015 2:07:55 PM	Response	Harrison	F... N / A
24			7/13/2015 2:07:55 PM	Response	VA	F... N / A
25	1D201507311807558230001	DwnLocnFloorColun	7/13/2015 2:07:55 PM	Request	select location, floor	FILE
26			7/13/2015 2:07:55 PM	Response	BS	F... N / A
27			7/13/2015 2:07:55 PM	Response	DC	F... N / A
28			7/13/2015 2:07:55 PM	Response	Del1	F... N / A
29			7/13/2015 2:07:55 PM	Response	Harrison	F... N / A
30			7/13/2015 2:07:55 PM	Response	VA	F... N / A
31	1D201507311807562550001	DwnRequests	7/13/2015 2:07:56 PM	Request	SELECT TOP 2000 amreque	FILE
32			7/13/2015 2:07:56 PM	Response	111311	LOCATI... N / A
33	1D201507311807568350001	DwnEmployeeNames	7/13/2015 2:07:56 PM	Request	select full_name, contac	FILE
34			7/13/2015 2:07:56 PM	Response	Steve Elise	... N / A
35	1D201507311807573850001	DwnEmployeeNames	7/13/2015 2:07:57 PM	Request	select full_name, contac	FILE
36			7/13/2015 2:07:57 PM	Response	Frank Landau	... N / A
37	1D201507311807580050001	DwnSerialNumbers	7/13/2015 2:07:58 PM	Request	select assetTag, LEASER	FILE
38			7/13/2015 2:07:58 PM	Response	12345	2... N / A
39			7/13/2015 2:07:58 PM	Response	12345	3... N / A

SBS-Pathfinder automatically maintains detailed trace logs of all activity by record and by event and allows transaction viewing, configuring and archiving of log files through the Log Explorer product that is bundled with the purchase of SBS-Pathfinder.

SBS-Pathfinder is a product of Sentinel Business Services, LLC