
TM

VSAT-fx

Overview

Designed for VSAT Networks: VSAT-fx™ is a Windows PC based program designed to send files from a single host PC to numerous client PCs using a single data stream. VSAT-fx™ was designed from the ground up to optimize the bandwidth of a VSAT (2-way satellite) network. Its maximum transfer speeds will support multi-megabit/sec data rates. VSAT-fx™ can also be employed on one-way, simplex networks, such as Direct Broadcast Satellites (DBS). VSAT-fx™ requires a TCP/IP environment capable of supporting multicast addresses. Though it was designed for satellite networks, VSAT-fx™ will work across a LAN/WAN as well. VSAT-fx™ is compatible with Windows 95/98/2000/XP.

Reliable Multicast File Transfer: The primary function of VSAT-fx™ is to broadcast (multicast) files reliably. Client sites provide acknowledgements that the files were received error free, or appropriate steps are taken by the host automatically to ensure a complete file is present on the clients. Automated reports provide easy to understand results. Reports include information on successful file transfers, sites addressed, non-responsive sites, link quality, and much more.

Simple and Inexpensive to Implement: When was the last time you purchased serious software that still fit on a floppy disk? VSAT-fx™ is elegant in its simplicity. It is robust and feature packed, yet takes few resources. Software files for host and client are each less than one megabyte. The host set up takes less than 30 minutes. Client software requires less than five. You can learn to use the program in under one hour. Master it in a few afternoons. Integration is so easy, we hate to even call it that. You can use your existing database of client information to develop queries and form site groups. For example, VSAT-fx™ Host only needs a list of IP addresses (or appropriate string names) as the data required to establish a group. If you can run a query and export it to a csv (comma separated value) text file, VSAT-fx™ will use that data for its next multicast session. We don't ask you to keep up with another database.

Features You Expect: VSAT-fx™ is designed with these powerful features:

- error free, verified, file delivery
- complete and flexible addressing functions (unlimited sites, groups)
- intelligent algorithms identify and report on non-responsive or troublesome sites
- diagnostic functions provide details on link quality (includes percentage of packets rec'd error free)
- windowed transmissions allow data to be automatically transferred for a specific time period each day
- use of your existing databases minimize set up time and eliminates synchronization problems
- throttling functions manage outbound bandwidth, features to manage back channel bandwidth
- detailed logs and reports keep you informed

About Us: Milestone Technologies Inc., located in Raleigh, North Carolina, USA has been in the business of developing data broadcasting software since 1990. We understand what our customers need and want in a file broadcast product. We've proven our longevity and watched many companies come and go. We can provide software and consulting services to get your data broadcast project off the ground. For more information, call or write:

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VSAT-fx

Detailed Feature List

Updated (3/1/2007)

Feature	Details	Comment
Operating System:	Windows 2000/XP	Recommended OS
	Windows 98	Compatible
	Windows 95 SR2	Compatible
Hardware Platform:	PC	(tested on Intel processors)
Interface:	Ethernet/Fast Ethernet	Serial interface can be added in future versions
Standard Protocols:	TCP/IP, Multicast	Network must allow pass through of multicast addresses (future versions will be available for non-multicast compliant networks)
Applications:	VSAT (Very Small Aperture Terminals) networks	2-way, networks where remote clients can also send data back through the satellite to the host
	DBS (Direct Broadcast Satellites)	1- way, or simplex only
	DBS with back channel	1-way satellite system but with a return channel to the host, usually a terrestrial link of some type.
	FM Subcarriers	Transfer data over FM subcarriers
	HDTV or cable data	Simplex (1-way) file broadcasting
	Virtually any network	Multicast must be supported
	LAN/WAN	VSAT-fx works in a LAN/WAN environment as well.
Sending Files:	Send files reliably	Intelligent lost packet replacement algorithms
	Verified delivery	(2-way mode) Clients acknowledge receipt of files
	Simplex Mode	(1-way mode) No back channel required
	Built In Delays	Allow time for slower PCs to process incoming files
	Send lost packets	Send lost or corrupt packets only
	Resend entire file	Set conditions for which the entire file is to be re-sent
	Custom settings for each mcast session	Each file or list of files to be sent can be associated with its own set of parameters, addresses and methods
	File Masks	Specify file names, specifications, or file masks to send
	Name Collisions	Options for handling name collisions on client, include ignore, overwrite, and rename.
	Data Filtering	Tell client to only accept certain file names, file specifications, or specified file masks
Keep Partial Files	Tell client to keep partial files so that even days later a download could be resumed to complete the file.	

Protocol Features:	Variable redundancy	Send data from one to 10 times, for noisy environments (for most cases, sending once is fine)
	Variable BlockSize	Helps to balance efficiency and error rates
	Host Throttling	Set host outbound data rate in kbytes/sec
	Inbound Bandwidth Management	Tools to control combined back channel bandwidth used by clients
	Keep Client Responses	Host can keep a copy of all individual responses received from clients. Useful for troubleshooting.
	Intelligent ACK Monitoring	Host is able to ignore dead clients and report them.
	Remote Update	Remotely update client's configuration files from host
Addressing:	Sites	Send data to a list of sites
	Groups	Send data to a list of groups
	Groups+Sites	Combine groups with individual sites
	Except sites function	Exclude this list of sites from broadcast
	Except groups function	Exclude these groups from broadcast
	Client Identification	Clients identified by IP address or string name
	Long Client Names	Descriptive string name of client, used in reports
	Long Host Name	Descriptive string name of host, used in reports
	Virtually unlimited groups	Have as many groups as you need(1)
	Virtually unlimited client memberships	Clients can be members of as many groups as needed at the same time (1)
Scheduling:	Start Time	Schedule when a broadcast is to start
	Stop Time	Schedule when a broadcast is to stop
	Interval	If first attempt is not complete, schedule how long before each subsequent attempt is made.
	Maximum Tries	Specify the maximum number of attempts that will be made to reach all clients.
Simple Integration:	Direct File Format	Uses your existing databases to create groups, and network site lists.
Logging Functions:	Summary logs	Record all files sent, received, date, time, link quality, Summary of error data, key parameters used
	Error logs	Error codes, warnings, missed/corrupt blocks
	Remote Client Summary logs	Automatic retrieval of summary log data from clients
	Configuration error log (host)	Logs problems with configuration files
	Good name log (client)	Client's list of file names received ok
	Bad name log (client)	Client's list of file names with errors
	Transmit name log (host)	List of all files sent by host
	CSV option (host and client)	Create logs as comma separated value (CSV) files for easy importing into spreadsheets or databases
	Control Log File Sizes	Sizes of all log files can be individually specified
	Log File Directories	Specify the location of each log file, including network drives and directories

Reporting:	Host Detail Report	Provides a list of all activity for recent mcast session, including sites that rec'd data ok, problem sites, file sent, and configuration parameters that were set.
	Detail Level Parameters	Determine how much detail you want in host reports.
	Automatic Reports	Turn automatic reports on or off
	Custom Locations	User can specify location of reports, including network drives and directories
Port Configurations:		
	Outbound Channel port	Specify the port number for outbound multicasts
	Inbound (Back Channel) port	Specify the port number for acknowledgements
Directory Functions:		
	Source Directory	Specify one or more directories for source files
	Recursive Search	Send files in subdirectories as well
	Mirror Directory Structure	Create same subdirectory structure on client as on host
	Target Directory	Specify directory where files will be delivered on clients
	Target Directory Variables	Allows each client to store incoming files in a locally specified directory
	Force Directory	If specified client directory not present, create it.
	Default Directory	Specify where data is stored on clients if other locations not available.
Diagnostics:		
	Link Quality	Indicates percentage of missed/corrupt blocks
	File Quality	Percentage of how much of a file has been received.
	Keep Files With Errors	See exactly what and how much data is missing or corrupt. Useful in troubleshooting.
Upcoming Features:		
	Contact us!!	Version 2 is going to be incredible. Remote monitoring, sophisticated GUI, multi-threading. Features you thought you had to pay millions for will cost you far less than you ever imagined. And they will work too!

Note (1): There are practical limits to all values, generally determined by such things as disk space, memory, processing power, and machine configuration.

Contact us or visit us on the web today.

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