

# PRIME FACTORS, INC.

your key to data security



## Psypher™X12

### Dependable Security for X12 Transaction Files

When there is a requirement to protect 820 payments or any other X12 business transaction, PsypherX12 can complement any X12 translator by adding necessary security functions. Consisting of two main components, PsypherX12 has an interactive menu-driven utility that manages a trading partner database of encrypted keys and security options, and a script component that automatically secures transaction files on a regularly scheduled basis. PsypherX12 conforms to the X12.58 standard specifications and provides the following important features:

#### Data Encryption

Confidentiality is ensured using strong encryption algorithms (56-bit DES, 112-bit Triple DES, and 168-bit Triple DES).

#### Message Authentication

PsypherX12 verifies the origins of transmitted files and their integrity using either the X9.9 Message Authentication Codes (MACs) developed by the financial industry or RSA digital signatures with X.509v3 certificates.

#### Data Compression

PsypherX12 reduces transmission time and expense by compressing data using the popular X9.32 compression algorithm (also known as LZW compression).

#### Text/Data Control

Communication through multiple Value Added Networks (VANs) can be simplified using text-filtering techniques to avoid sending binary data.

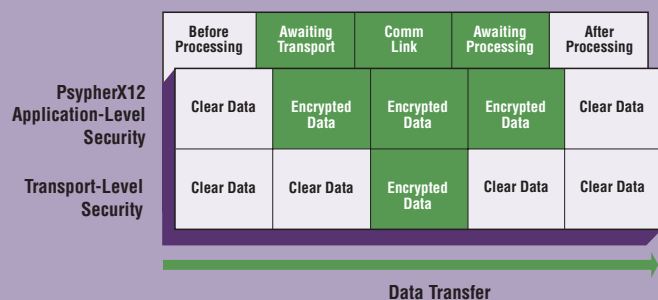
#### Ensure Data Security with PsypherX12

Embedded security includes encrypted segments of data groups and transaction sets within a transaction file. This file has a clear header and footer for routing.



#### Application vs. Transport Level Security

Application level security is a better solution because it protects data at every stage, instead of only during the communications link.



## Tools Designed for the Real World

Key Management and all other processing occurs on the same platform in order to simplify control of your computing environment. Robust password protection of administrative functions, role-based user definitions, and key entry by components increase flexibility without compromising security.

The software includes many ease-of-use features such as the export/import of trading partner definitions, a complete audit log, optional trace facility, key check values, and built-in test keys.

PsypherX12 also provides interoperability with other vendors' X12 security products which support the X12.58 v3050 or v4010 security standard.

## Cross Platform Support

Like all Prime Factors products, PsypherX12 provides for backward compatibility with previous versions of the product and is available for mainframes, AS/400s, HP9000s, Suns, RS/6000s, and PCs running Windows or Linux. To arrange a 30-day trial at no charge, visit our web site at [www.primefactors.com](http://www.primefactors.com).

## The Psypher Security Suite

PsypherX12 is part of the Psypher Security Suite, which also contains advanced support for other data security needs:

### Psypher<sup>TM</sup>EDIFACT

Supports the internal ISO 9735 security structures that protect EDIFACT-formatted business transaction files.

### Psypher<sup>TM</sup>EDI

Provides a proprietary security envelope for transaction files of any format, including X12 and EDIFACT.

### Psypher<sup>TM</sup>OPS

Supports file transfers using the OpenPGP formats defined in RFC1991 and RFC2440.

## General Security Options

General security options can be set for each trading partner.

ID	Service	Encryption/Filtering
FA	None	Method: DES Mode: CBC Filtering: None

## ISA Options

ISA options can be set for each trading partner.

Terminator	Element	Sub Element	ID Qualifier	Test Indicator	Next Control Num.
TC	ID	TF	ZZ	Production	00000001

## Audit Log

The audit log shows all security-related activity, not just the errors.

```
2002/06/11 09:49:17 INF401 (MANY) Data secured OK. Partner: TIPSY,
2002/06/11 09:49:17 Transaction Date: 06/11/2002, Time: 09:49:17,
2002/06/11 09:49:17 Records: 30, DES
2002/06/11 15:13:52 INF401 (MANY) Data secured OK. Partner: TIPSY,
2002/06/11 15:13:52 Transaction Date: 06/11/2002, Time: 15:13:52,
2002/06/11 15:13:52 Records: 7, DES
2002/06/11 15:14:26 INF413 (MANY) ID: FA, Secured. ISA Chiff 211290000,
2002/06/11 15:14:26 Receiver: CREDITUNION, GRP Chiff 211290000, Auth:
2002/06/11 15:14:26 KD4001(D89531), Enc: KDE001(38F0F6)
2002/06/11 15:14:26 INF401 (MANY) Data secured OK. Partner: CREDITUNION,
2002/06/11 15:14:26 Transaction Date: 11/29/1997, Time: 19:08, ISA
2002/06/11 15:14:26 Chiff 211290000
2002/06/11 16:22:21 ER1156 (MANY) Interchange message is not to us. ID:
2002/06/11 16:22:21 CREDITUNION
2002/06/11 16:22:21 ER1152 (MANY) Transaction in Error. Date: 11/29/1997,
2002/06/11 16:22:21 Time: 19:08, ISA Chiff 211290000
2002/06/11 16:22:21 ER1154 (MANY) No interchanges processed, all interchanges
2002/06/11 16:22:21 were copied to the reject file.
2002/06/11 16:22:21 INF140 (MANY) RECVX12 function failed. 3
```

Download  
**Psypher<sup>TM</sup>X12**  
for a **30 day**  
**free**  
**trial.**



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**World Headquarters:** Prime Factors, Inc., 4725 Village Plaza Loop, Suite 100, Eugene, OR 97401 • Phone: 541.345.4334, Fax: 541.345.6818 • [www.primefactors.com](http://www.primefactors.com)

**Europe:** evenBetter S.r.l., Via Frua, 14 - 20146 Milano, Italy • Phone: +39.02.36537210, Fax: +39.02.36537215