



## Why you need SMART TS XL

Hello,

Describing a product that can perform such a wide variety of tasks for almost every level user and department in the IT arena is not easy. We have been demonstrating SMART TS XL to many CIO executives, IT managers and system analysts, requesting their feedback. “What do you see in SMART TS XL?” we ask them.

We have collected all the feedback and compiled this document, explaining about the tool and describing how it can assist any CIO or IT department in its day to day operations and activities. One of the sentences that caught our attention at an existing client by a user was: “IT’S A NEW WAY OF LIFE AROUND HERE”. I asked her what it meant. She explained that SMART TS XL is not just a “search engine”. It is a methodology used to learn systems, transfer knowledge, troubleshoot problems and much more.

IN-COM has a number of sites with thousands of satisfied users, but a small sample includes:

-  CITIBANK
-  YRCW (Yellow Freight)
-  SOUTHWEST Airlines
-  PIER1 Imports
-  Sprint
-  Experian
-  JPMorgan Chase
-  Neiman Marcus

We dare any company to pilot SMART TS XL for 30 days !

We dare it - because once you start using SMART TS XL - there is no going back.

Call us today - and qualify for a free software.

Kindest Regards,  
Shlomo Friman, CEO  
IN-COM Data Systems  
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Strategies4Data  
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## 1. What is SMART TS XL ?

***A web Based, simple to use, lightning fast, "GOOGLE" like search and analysis tool for mainframe, AS400 and UNIX applications. Smart TS XL can process billions of Lines of code in a matter of seconds***

SMART TS XL is a Mainframe, AS400 and Unix search & analysis tool that works with both state of the art and legacy systems. IN-COM Data Systems architected SMART TS XL using patented technology to run on cost effective server platforms. By off loading the workload from the expensive Mainframe or AS400 environments, you are able to extend the life of your large processor in addition to freeing up MIPs for mission critical production processing.

SMART TS XL quickly discovers, traces, links and then graphically displays each and every relationship within your applications. For the first time, in one place, you can see all of the links from disparate repositories and IT assets such as COBOL, RPG, Natural, PL1, DB2, VSAM, DDL, DDS, CICS, MAPs, JCL, CL, Focus, CLISTS, REXX, I5 Screen Definition Files, I5 Print Definition Files, as well as text files including job documentation, Visio, e-mail and more. Company wide relationships are revealed via color-coded graphics with drill down capability.

SMART TS XL affords visibility into how your applications and IT assets are inter-connected, whether third party packaged software or in-house written systems. With this cost-effective tool, scoping, impact analyst, and search times are greatly reduced, helping to keep your projects ahead of schedule and within budget.

Use SMART TS XL to calculate resource requirements and time estimates during the analysis phase. During budget periods where scoping is required to determine which projects can be accomplished, Smart TS can provide fast and accurate estimates to allow management to effectively manage business user requirements. With this impact analysis your IT organization becomes the cornerstone for faster time to market. Citibank, Southwest Airlines and Sprint currently use smart TS XL and have documented savings of over \$3 million in the past year.

***Finally, IT has a tool to follow each path down every nook and cranny of the enterprise.***



## 2. What do you “win” by using SMART TS XL? (ROI)

### 1. Cost Reduction

- Very conservative estimate of a 20%- 30% time savings for program enhancement and maintenance.
- Reduces testing time by finding impacts during analysis and not during systems testing.
- Delay / Avoid Costly Hardware Upgrades
- MIPS Savings
  - ⌘ Major Bank reported savings of \$45K per month
  - ⌘ Perhaps hundreds or in some cases, thousands of users will need LESS 3270 (green screen) to view/print/analyze/follow programs, reducing Mainframe activity.
- Client Server Based
  - ⌘ Scans, Searches, Impact Analysis, Cross Reference reports are offloaded from the mainframes to an affordable Windows server.
- Intuitive GUI
  - ⌘ Minimal training costs
  - ⌘ Used by all skill levels of employees - not just few high level engineers
  - ⌘ Can be used by business staff for documentation, etc.

### 2. Improved Project Management/Human Resources

- Single Repository for all Data Sources
- Dramatically Improved Scoping / System Assessment
- Reduced ‘turn around’ time
- Rapid knowledge transfer (Document Data Flow)
  - ⌘ Intuitive - low learning curve
  - ⌘ New temps/staff/contractors are productive immediately - since no training or prior Mainframe knowledge is required.
  - ⌘ Every level user can now perform complicated tasks
  - ⌘ FREES UP SMEs (subject matter experts)
  - ⌘ Search/impact/xref/ tasks now take seconds instead of hours
- ROI Reporting (Monetary Savings)
- Audit Reporting (SOX)

### 3. Improved Quality

- “Get It Right the First Time”
- Understand the ‘down steam’ effect of changes
- Fully Understand Impact
  - ⌘ More accurate - as it covers all data types across the enterprise
  - ⌘ Offer easy direct interface to mainframe and AS400 world - even to USERS. TESTERS, BUSINESS ANALYSTS, MANAGERS, and TECHNICAL WRITERS, not just the very technical staff.
- Discover missing components
  - ⌘ Can perform complex Boolean searches - THAT SIMPLY CANNOT BE PERFORMED ON MAINFRAME.
  - ⌘ Never miss programs that need to be fixed/changed. Better to get EXTRA information than to miss key system components.



- Reduce Testing
  - ⌘ Bug fixes are MUCH QUICKER - easy to locate/pinpoint error and see trickle down effect
- Better Response to the Customer
  - ⌘ **IT can offer a much higher level service to all company departments**

#### **4. Monitor Offshore User Usage**

SMART TS XL offers a detailed audit trail. This allows the CLIENT to monitor all the offshore user searches/usage/requests. This feature avoids the client being billed for 200 programmers when actually only 50 are working on their systems. Acts as a good checkpoint system for QA between the CLIENT and the Offshore Company.

#### **5. Confirm Bid Quotes**

Client receives a quote for a project totaling 1000 man-hours. SMART TS XL offers detailed complexity analysis report, allowing the client to perform JIT (Just In Time) Impact Analysis. Using the Halstead methodology or industry standard numbers, the client can confirm the bid quotes in a few minutes of searching with SMART TS XL. The complexity reports can SUM and AVERAGE for amount days required for a specific project.

#### **6. Transfer of Knowledge**

Taking over tens of thousands of programs is a very difficult task. SMART TS XL offers many built in tools to make this task easier. The FIND, FOLLOW, and FORMULATE methodology has been proven to be very effective for learning new systems. Color Coding (can be customized for each user) also lets users highlight specific items through out the system, making it visibly easier to understand.



## How Does SMART TS XL save TIME and MONEY ?

SMART TS XL performs in split seconds what takes hours/days/weeks to accomplish by searching on the mainframe. SMART TS XL also can perform tasks that are currently impossible to do on the mainframe and AS400 environments.

Not only do these search tasks complete under a second, but much thought and design has been focused on the display and manipulation of the search results.

SMART TS XL saves the users much time by offering a multitude of options for reports, summaries, line counts, hit counts, source text summaries and more. All of which can be saved as text, html, word, excel, PDF, or copied and pasted into other Windows documents.

When the usage of SMART TS XL is spread across an enterprise, and used by multiple departments, this translates into savings of dollars, MIPS, project time and human resources time.

## How much money will you save using this tool?

Current customers report savings in the millions of dollars annually. Of course the larger the user base, the larger the savings. These savings give SMART TS XL an ROI between **80%-2500%**. In one case, the ROI was over 8000% due to the vast number of users coupled with an overloaded slow mainframe.

CITI Bank analyzed and recorded a savings of **\$45,000 a month** in MIPS alone - with only 500 users. **To date they have expanded the usage of SMART TS XL to many more users.**

## Can savings be measured and how have these metrics been calculated?

In the past 3 years, IN-COM has worked with clients to produce these metrics. In some cases these metrics calculations were done prior to the client purchasing the product. Searches were divided into 3 categories.

SIMPLE - Single and multiple plain word scans

MEDIUM - Boolean Word Scans

COMPLEX - Proximity Boolean Word Scans

SMEs were tasked with all three types of searches using Mainframe tools and then the same searches were done using the SMART TS XL tool.

An actual dollar in savings was allocated to each type of search and implemented into the statistics and audit trails that are kept within the SMART TS XL system.



## **What does it take to get SMART TS XL installed and running?**

Not much. Our last two installations lasted only a few hours. We believe it is very important to perform a free 3 hour training session to an agreed number of people from every department following the tool installation. SMART TS XL requires no initial training in order to be successfully used because of its highly intuitive design. However, a short session will ensure the client achieves maximum benefits from the tool.

Here are the **steps** required to get SMART TS XL up and working:

### **DEFINE and PREPARE MAINFRAME/AS400/UNIX FILES**

The mainframe/as400/unix may contain many types of information stored in multiple locations. Your first step is to decide on what information will be added to the SMART TS XL server. These files are FTPd or NDMd as simple flat files using standard utilities. IN-COM staff can offer the client a variety of JCL templates and scripts to assist with this task. If there is an existing change management system in place, a simple step can be modified to send a copy of modules been updated to the SMART TS XL server.

### **INSTALL SMART TS XL**

There is a 15 minute installation process requiring access to an SQL database. For this reason a network operations person should be present because the installation process creates a table and will require the user/password to the SQL database. Simply run the installation CD, choose the install directories and you are ready to load the data.

### **MAINTAIN SMART TS XL**

There are 2 methods to keep the mainframe and SMART TS XL server in sync. First is the full load of all data and second is a delta load, where only changed items are loaded. A full reload nightly should take about 45 minutes and a delta should take about 10 minutes. Ask about the versioning abilities of Smart TS.

### **AUTOMATING THE SYSTEM**

SMART TS XL can be set to run in automated unattended mode. When the mainframe JCL is scheduled to run nightly, SMART TS XL is kept up to date automatically without any human intervention.

The only "EXTRA" MIPs used for loading the SMART TS XL tool are the MIPs used to punch the data into flat files and FTP them to the SMART TS XL sever.



## What are the day-to-day uses of SMART TS XL?

### As a project manager Smart TS helps to define:

1. the scope of the project,
2. the level of experience required and
3. helpful in assigning workload.

### As an analyst, it provides:

1. accurate results in seconds
2. allowing for complete and comprehensive
3. design and analysis in a
4. timely fashion.

### Developers and analysts:

1. do not waste time or
2. tie up mainframe resources or
3. running multiple system scans.

Smart TS provides results in minutes that would take days or weeks using conventional scans.

### As a developer, it helps with

1. researching
2. usage of data and
3. test set up.

### A developer can:

1. enhance their skills by
2. allowing quick searches for
3. code examples or methods.

### Other uses:

1. Scoping and Planning
2. Impact Analysis
3. Knowledge Transfer of Legacy Systems
4. Modification of Existing Code
5. Restructuring Complex Code
6. Code Reviews and Re-engineering
7. Change Management
8. Code Reuse



### 3. Key Features of SMART TS XL

#### ✚ Global Enterprise Search Capabilities

- ✚ Across platforms - Mainframe, Midrange, AS400, Unix
- ✚ Across languages - COBOL, ASM, NATURAL, RPG, PL1, REXX, JCL, CL,...
- ✚ Across data types - PDS, Librarian, Panvalet, ADABAS, SQL, DB2,...
- ✚ Across PC documents - Excel, Word, PPT, RTF, HTML, PDF, ASP, TXT,...

#### ✚ Hyperlinks and Cross References without Predefined Rules

- ✚ Follows seamlessly referenced modules using web style hyperlinks
- ✚ Formulates graphically multi-level cross reference reports

#### ✚ Complexity Analysis

- ✚ Calculates module complexity using both Hallstead and "Industry standard" methods
- ✚ Derives accurate project level of effort (LOE) reports

#### ✚ Powerful Search Syntax Support

- ✚ Free-text, Boolean, Proximity, Range, wildcard searches

#### ✚ Synonym Dictionaries

- ✚ Allows corporations to define and build corporate vocabulary dictionaries
- ✚ Searching on one version of field name - will retrieve all versions of field name
- ✚ Dynamic updating online via WEB-like WIKIPEDIA.

#### ✚ Saved Queries Library

- ✚ System has built in saved queries per category
- ✚ Users are able to create complex saved queries with dynamic input parameters
- ✚ Saved queries can assist new users to perform complex searches out of the box

#### ✚ Other:

- ✚ Asset management reporting system
- ✚ User defined word/phrase color coding





#### 4. Main Benefits Realized with SMART TS XL

- ✚ **Speed - Split Second Execution**
  - Most searches execute in less than one second
- ✚ **Accurate Reliable Results**
  - If there's no hyperlink image, it is a missing member.
- ✚ **Easy to Deploy, Maintain and Use**
  - Installs within hours
  - Administrative user interface
  - Unattended data updates
  - Fully web based
  - Minimal learning curve
- ✚ **Scalable**
  - Handles terabytes of information while maintaining speed
- ✚ **Reduces MIPS**
  - Runs on a standalone windows based server
- ✚ **Presentation Layer**
  - Find, Follow, Formulate methodology
  - Exports to MS Excel, MS Word, PDF, and HTML
  - Intuitive presentation of results
- ✚ **Saves you Money**
  - Do more with current staff
  - Work smarter and more efficiently
  - Training and research tool for programming staff
  - Extend the life of your CPU
- ✚ **Limit Risk**
  - Find precise changes required within millions of lines of code
  - Feel confident that work is thorough (all occurrences are found)
  - Risk mitigation when downsizing (determine who is making changes/ has knowledge)
- ✚ **Save Time**
  - Impact Analysis completed in less time
  - Jump start for programming staff when taking on new applications



## **5. Do you REALLY need SMART TS XL??**

Today, we cannot imagine life without cell phones or the Internet.

**Today, all of our clients cannot imagine working without SMART TS XL.**

We will gladly let you speak to them and hear directly from them how SMART TS XL improves their processes.

**You need SMART TS XL if any of the following apply to you:**

- I.T. department who need to do more with less
- Multiple Application Development Managers & Projects
- Mixture of batch / online processing
  - Complex applications
  - CICS tables etc.
- Multiple Mainframes/AS400s
- Mixture of Legacy and Client Server code
- High Turnover rate of I.T. staff
- Multiple Data Types: Cobol, PL1, Adabas, Focus, SAS,DB2
- Offshore Outsourcing:
  - Analysis and scoping of changes
- Conversion to Client Server
- Mainframe at maximum capacity
- Software as a Service Model (Easy to buy)



## 6. Pricing - Purchase and Maintenance

See the folks at Strategies4Data. Contact [Sales@strategies4data.com](mailto:Sales@strategies4data.com) or call 817 704 3470  
**IN-COM GUARANTEES 100% ROI DURING FIRST YEAR !**

Price is determined either by lines of code or by the number of members loaded into the SMART TS XL system. SMART TS XL may be leased or purchased. Although your focus is program code, don't forget that there are also JCLS, PROCS, CARDS, ASM, DDM, MS Word, Excel, and many other data types that can also be easily searched with SMART TS XL. Additional options include Complexity Analysis and Security modules (matches the mainframe or AS400 access rights), depending on your needs.

Price for unlimited lines of DataStage Source code (DSX files) is \$9,950 through S4D only! Connectivity to all other Data Sources (as listed above) is during the contracted period. (Up to 6 months at no charge)! Imagine all the free information available during this period.

It is important to note that the pricing is unlimited regarding:  
 USERS, SEARCHES, WORK STATIONS  
 MIPS, DATA TYPES, SERVERS, MAINFRAMES  
 SEATS, LOCATIONS

Sample Price Quote generated by our online system:

### Pricing & ROI Quote



Friday, February 23, 2007

<b>Parameters</b>					
Average MIPS Cost user/day	\$	1.00	Rate to USD \$	1.0	United States
Number Users		30	Small Company		Load Template
Average Hourly Wage	\$	50.00	Company Name: _____		
Working days per month		22	No Selection		Optional Add-on Features
Working months per year		11	1,000,000		Estimated Lines
Searches per Day per User		1	No Selection		Estimated Elements
Minutes required on Mainframe		20			
<b>SMART TS XL COST</b>	\$	<b>32,214.00</b>	Generate	Reset	

ROI and Savings Realized	1st year recovers all costs within months! Following years shows months to recover yearly maintenance costs				
	Total 4 years	Year 1	Year 2	Year 3	Year 4
Investment	\$46,956.00	\$32,214.00	\$4,914.00	\$4,914.00	\$4,914.00
Savings	\$488,840.00	\$122,210.00	\$122,210.00	\$122,210.00	\$122,210.00
Months to recover investment	4.61	3.16	0.48	0.48	0.48
ROI	1,041.06%	379.37%	2,486.98%	2,486.98%	2,486.98%

SMART TS XL Search Tools	Single search includes all data types				Total Costs	MAINFRAME Search Tools	Have to search each data type				Total Costs
	search count/User	min per search	total hours	cost			search count/User	min per search	total hours	cost	
Searches	1	1	0.02	\$0.83		1	20	0.33	\$16.67		
MIPS Costs				\$0.00					\$1.00		
Total daily usage per user				<b>\$0.83</b>					<b>\$17.67</b>		
Total monthly costs per user				\$18.33					\$388.67		
Total yearly costs per user				\$201.67					\$4,275.33		
Total yearly costs for all users				<b>\$6,050.00</b>					<b>\$128,260.00</b>		



## 7. What are my Next Steps

Call Strategies4DATA today and see if you qualify for a free trial.

To qualify:

1. Must have a windows server or allow IN-COM to supply you with one
2. Allow IN-COM to train your DataStage Team and one system admin)
3. Willing to load the bulk of your source code from Mainframe, Unix and AS400 as well as access to all related DSX files
4. Agree to meet with IN-COM and discuss successful PILOT criteria
5. Meet with IN-COM on weekly basis - discuss PILOT usage and user satisfaction

Certain Labor Charges are assessed.

If you are currently **VERY BUSY** with urgent projects or your team has a very **demanding deadline to meet**, ALL THE MORE reason to get your pilot installed immediately and start using SMART TS XL today.

Using SMART (TS) XL is like flying FIRST CLASS.

Once you do it - You never go back to coach.



**IN-COM**  
DATA SYSTEMS

