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BURTON GRAD ASSOCIATES, INC.

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April 20, 1998

Mr. Al Hoover  
4600 Lakehurst Court  
P.O. Box 7160  
Dublin, OH 43017

Dear Al:

**Subject: Timbuktu Due Diligence**

Sterling Commerce, Inc. (SCI) and its Communications Software Group (CSG) requested Burton Grad Associates, Inc. (BGAI) to perform a technical due diligence study of Timbuktu, a \$50M plus software company located in Atlanta, Georgia. BGAI has prepared and is delivering its report covering our technical findings and recommendations.

BGAI retained two Associates, Martin Silberberg and Gary McSwain, to perform the on-site work. The professional profiles for Burton Grad, Marty Silberberg and Gary McSwain are attached to the initial BGAI due diligence report.

One appendix attached to the report lists the specific items which were reviewed during the telephone and on-site meetings. In addition, separate appendices from Marty Silberberg and from Gary McSwain containing their detailed observations, comments, concerns and suggestions are attached to the report; these match to the question list.

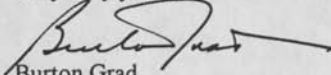
BGAI has not identified any items during its technical due diligence review which would indicate that SCI/CSG should not proceed with the Timbuktu acquisition.

However, because the technical due diligence work was performed under a very short time schedule, BGAI strongly recommends that SCI/CSG conduct a more detailed technical due diligence study. This would enable SCI/ISG to identify more precisely what needs to be done to migrate the Timbuktu products to meet the SCI/CSG standards and to incorporate the Timbuktu technologies so as to serve new SCI market opportunities.

Mr. Al Hoover  
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April 20, 1998

If you have any comments regarding this report, please contact me or if you wish, you may directly contact either Marty Silberberg or Gary McSwain.

Very truly yours,

  
Burton Grad

Enclosures

BG:3802

cc: Bob Barker  
Jim Hoyt  
Steve Shiflet  
Clark Woodford

**Study of Timbuktu Products and Services  
Technical Due Diligence Report**

**Prepared for:**

Sterling Commerce, Inc.  
Communications Software Group  
4600 Lakehurst Court  
P.O. Box 8000  
Dublin, OH 43016-2000

**Prepared by:**

Burton Grad Associates, Inc.  
101 Post Road East  
Westport, CT 06880

Burton Grad  
Gary McSwain  
Martin Silberberg

**Date:**

April 20, 1998

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## **SECTION I. Objectives and Work Plan**

As requested, Burton Grad Associates, Inc. (BGAI) has performed a technical due diligence study of Timbuktu, an Atlanta-based company, whose assets Sterling Commerce Inc.'s (SCI) Communications Software Group (CSG) is preparing to acquire.

The primary purpose of this independent technical due diligence study is to ensure that the technical representations made by Timbuktu to SCI/CSG are accurate and complete. A second objective is to determine if there are any product or development issues which would impact SCI/CSG's estimates of current value or future costs.

The due diligence project was managed by Burton Grad, president of BGAI, with Martin Silberberg and Gary McSwain, BGAI Associates, as the technical consultants on this project.

All other areas of due diligence (legal, financial, human resources, marketing, sales, support, customer satisfaction and administration) were covered separately by SCI/CSG using designated consultants or Sterling personnel and were not part of the BGAI assignment.

A professional profile for Burton Grad is enclosed as Appendix A-1. Martin Silberberg's profile is enclosed as Appendix A-2. Gary McSwain's profile is Appendix A-3

### **Work Plan**

BGAI has followed the work plan described below:

1. BGAI requested certain information from Timbuktu for all technical areas to be examined. The request list was used with Timbuktu after the content was reviewed and additional questions included from SCI/CSG (see Appendix B).
2. BGAI conducted telephone and on-site interviews with the two key technical executives from Timbuktu and examined relevant materials for all technical areas.
3. BGAI then analyzed the Timbuktu materials and interview notes to identify any areas of concern and potential problems in the technical areas as well as to provide a response to each of the questions asked in Appendix B.
4. BGAI has prepared this report summarizing its findings without disclosing Timbuktu identified confidential materials to SCI or CSG.

## **SECTION II. Timbuktu Products and Technologies**

Timbuktu has three principal product lines: RemoteWare/OS2; RemoteWare/NT; and RemoteWare Express/NT (these are described in Appendix E-1). Each of these product lines consists of many individual programs which are sold separately. The complete product list (Appendix E-2) has 58 programs on it.

There are approximately 75 development personnel currently involved in designing, producing, testing and maintaining the RemoteWare products. Currently, there are also 48 people involved in customer service. This is 123 people out of a total staff of around 300.

### **SECTION III. Due Diligence Process**

After a preliminary analysis, an extended telephone conversation addressing key questions was held by Martin Silberberg with Shereef Nawar, Timbuktu's Chief Technical Officer on Monday, April 13, 1998. Face-to-face meetings were held by Gary McSwain and Marty Silberberg with Mr. Shereef and the Vice President of Development, Rodney Trugman, at Timbuktu headquarters in Atlanta on Tuesday, April 14, 1998. This one-day on-site review included a detailed code review of the programs by McSwain and detailed interviews following the Due Diligence Checklist (Appendix B) by Silberberg and McSwain. The meetings also provided the opportunity to receive and review samples of development management documents now being used by Timbuktu.

Most of the products were reviewed; they run on a variety of server platforms with various client configurations (hardware and software) The basic RemoteWare products are written in C, but essentially all of the applications products (Software Manager, Backup Manager, etc.) are written in C++.

A significant sample of the individual programs was examined in depth to determine how well the programs were structured, written and documented. There was also a limited audit to identify the embedded code which needs to be properly licensed.

#### **SECTION IV. Development Findings and Concerns**

Development is undergoing some significant organization changes at this time which are part of a maturing process that addresses the implications of the scope, complexity and broad customer base of Timbuktu's products.

It appears that the focus prior to the beginning of this year was on being first to market with new products and functions. That is certainly understandable. Now, other quality related matters are receiving increased attention. That is the right direction and should be continued.

Mr. Shereef and Mr. Trugman appear to be competent leaders who know what should be done and are taking appropriate actions. Much has been accomplished, but there are several concerns and recommendations related to Development at this point. While none of the concerns are significant enough for CSG not to proceed with the acquisition, the need for further analysis and for continued focus, effort and resources should be recognized.

1. No formal design, programming, documentation or testing tools, standards or methodologies were identified. Much is left to the discretion and choice of team leaders. The result is inconsistency in quality and excessive long-term support dependency on the knowledge residing with some individual developers.
2. Given the diversity and complexity of the environments in which Timbuktu's products are used by customers, it is not possible to fully test new products and functions in-house. However, there is no formal beta (customer) test as part of the development process.
3. Third-level maintenance (repair) responsibility is currently being returned to Development. Prior to this year, it was being done by a separate group in order to allow developers to focus on new product and function. The result was a growing lack of the detailed knowledge needed to address issues that got through the first and second levels of customer support; this was compounded by an overly lengthy process for reporting errors to Development.
4. Possibly because of the prior organization, there appeared to be a lack of information in development about the number, type and significance of customer reported programming bugs, documentation errors or usage problems
5. The development staff is relatively large (25% of total people), yet the application development work which has been done recently appears hurried and incomplete.
6. Timbuktu has used many coop students to write and test the code. This means that there may be greater than normal risk that non-licensed code may have entered new products being developed.



## SECTION V. Technical Findings

1. The core products are written in C and have a superior amount and detail of documentation. These programs are well structured according to commonly accepted programming standards. They read well which provides for speedier debugging and code repair.
2. The C++ programs do not come close in quality or structure to the C programs; however, this does not mean that they are functionally inadequate. It simply means that a new user or programmer will require a longer time to repair or enhance any of these programs.
3. All of the third-party code we saw has been identified by Timbuktu as having proper licenses. This has apparently been confirmed by legal due diligence.
4. There are no identified risks in terms of unauthorized code.

## SECTION VI. Recommendations

1. A set of consistent tools, standards and methodologies should be defined and all developers and testers should be trained in their use. The discipline required to use these tools and standards should be ensured by Development management through monitoring and use of the existing developer/tester performance evaluation process.
2. Beta test requirements should be identified and the appropriate customer sites should be selected and enlisted. Exceptions to the general rule should require approval at the VP or CTO level.
3. The planned reorganization of the technical maintenance function should be completed to ensure efficiency, responsiveness and customer satisfaction. Effectiveness in this context should be addressed in developer/tester performance requirements and accomplishments, with emphasis on first-level (team leader) responsibility. This should improve quality in the development and testing phases as well as in the maintenance operations.
4. The reorganization noted earlier should help significantly, but there still appears to be a need for enhanced (formalized) communication between Development and Customer Support on these matters.
5. In order to alleviate the weak technical situation regarding the C++ programs, it is essential that the C++ program authors spend the time necessary to go through each of these programs and document the overall and core functionality of the programs. All unnecessary comments should be removed. These comments are typically the ones that Visual C++ places in the source generated files.
6. All of the programs should be run through the Bounds Checker program and the results analyzed to reveal any discovered bugs or other serious defects.
7. Since a number of coop programers have been used to do programming, all of their code should be found and reviewed. The review would be to look for any possible inclusion or use of non-standard code that was not found or revealed in our limited time code review.
8. The testing team has been integrated into the development team. While this is usually good, it can have the side effect of testers closing their eyes because of too close a relationship. Training, discipline, measurement and support will be needed to maintain the independence of the testers.
9. Some definitive level of coding standards needs to be put in place as soon as possible. The lack of coding standards and lack of emphasis on such standards are real concerns that need to be addressed.

10. CSG will have to spend considerable development time and money to get the C++ code up to a satisfactory product quality standard.
11. CSG will need to determine a better way to package and price the programs rather than maintaining 58 different programs.
12. First and second level technical management needs to be strengthened (senior technical management seems quite satisfactory from a technical viewpoint).
13. A full due diligence study should be performed so that SCI/CSG can meet their usual level of assurance and understanding regarding not just the development and technical issues, but also for marketing, sales, customer service and other operations functions.

## PROFESSIONAL SUMMARY BURTON GRAD

Burton Grad, President of Burton Grad Associates, Inc. (BGAI), has a long record of significant contributions to the computer software and services industry. He has experience as a user and developer of application and systems products and as consultant, innovator, businessman and industry leader in the computer software and services community:

Since 1978 he has been a consultant for software products, software professional services, value added remarketers, processing services and other computer software and services businesses:

- ❖ Strategic planning, management and organizational consulting and product analysis, evaluation and review
- ❖ Company and product acquisition studies including due diligence and valuation for financial, tax and capitalization purposes
- ❖ Planning, assessment and analysis of business operations including quality and productivity measurements

Work is performed personally or with the assistance of well-known specialists in market research, customer service, industry applications and mainframe, midrange, workstation, client/server and personal computer systems.

This is a partial list from the more than 150 clients of BGAI:

- AGS Information Services (now part of Keane, Inc.)
- Broadview Associates and Geocapital Partners
- Expert Software
- Future Three
- Informatics (now part of Sterling Software)
- International Business Machines
- Keane, Inc.
- Morgan Stanley
- NCR Corporation
- Relay Technology
- SPSS, Inc.
- Sterling Software, Inc.
- Triad Systems Corporation
- TSI International

## BURTON GRAD

### Work Achievements

#### **Burton Grad Associates, Inc. (1978 - Present)**

- \* Strategic planning, management and organizational consulting and product analysis, evaluation and review
- \* Company and product valuation studies for financial, tax, capitalization and acquisition purposes
- \* Business assessment studies and implementation projects for product strategy, development, quality management and customer service
- \* Design and implementation of computer based training courses

#### **Customer Care, Inc. (1992 - 1996)**

- \* Publishing **CustomerCare Newsletter** and *CustomerCare Survey* directed at software companies' customer services activities: support, documentation, training and product consulting
- \* Providing consulting on customer service processes, and training for customer service personnel

#### **Heights Information Technology Service (1979 - 1983)**

- \* Professional Services for applications and systems development
- \* Use of professionals on a remote, work at home basis with effective project management

#### **International Business Machines Corporation (1960 - 1978)**

- \* Definition, design and implementation of application development systems strategy resulting in release of IBM's development management systems
- \* Development of application programs for every major industry
- \* Establishment of joint planning and programming development with European operations
- \* Announcement, development and initial support of CICS
- \* Management of application development for small business and process control systems
- \* Responsibility for the production, release and maintenance of close to 200 programs

- \* Conception of approach to and programs for text processing and office automation systems
- \* Development and expansion of computer based training systems
- \* Development of management science and scientific programs
- \* Participation in the structuring and unbundling of IBM program products
- \* Creation of the Study Organization Plan for specifying and designing application systems

#### **General Electric Company (1949 - 1960)**

- \* Programming of the first commercial computer (Univac I in Louisville)
- \* Development of discrete simulation techniques for manufacturing planning and control
- \* Invention of decision tables
- \* Study of automated factory design and implementation
- \* Initiation and use of advanced techniques for production, inventory and quality control

#### **Other Professional Activities**

##### **1972-Present ITAA (formerly ADAPSO)**

- \* Computer Software and Services Trade Association
- \* President, Treasurer and Board member of American Software Association Division of ITAA
- \* Member of ITAA Board
- \* Chair and member of various committees (Industry Relations, Software Capitalization, Software Openness, Technology Information Services, Quality Management)
- \* Executive Committee of Information Technology Foundation (Project Office)

**1968 and 1979** Principal author of Management Systems, published by Holt, Rinehart and Winston. Used for colleges and businesses for computer application system methodology and design.

**1950-Present** Speaker and chair at conferences and workshops and contributor to professional journals on various information technology subjects including decision tables, quality control, systems engineering and software capitalization.

**BURTON GRAD**

**Burton Grad Associates, Inc.**  
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(914) 631-1129  
(914) 631-1164 FAX

**EDUCATION**

1949 Bachelor of Management Engineering  
Rensselaer Polytechnic Institute  
Troy, New York

**POSITION HISTORY**

1978-Present **Burton Grad Associates, Inc.,**  
Founder and President  
Consultants to computer software and services companies

1992-1996 **CustomerCare, Inc.**  
Chairman  
Publisher and Consultants for software customer services

1978-1984 **Heights Information Technology Services, Inc.,**  
Founder and President  
Professional software services

1960-1978 **International Business Machines Corporation**  
Consultant - IBM Research Lab  
Director of Development - Data Processing  
Division (DPD)  
Manager - Development Services and Scientific  
Application Programs (DPD)  
Manager - Technical and Scientific Development  
(DPD)

1949-1960 **General Electric Company**  
Consultant - Advanced Application and Systems  
Development - Production Control Services  
Manager - Production Control Operation - Large  
Stream Turbine Division  
Manufacturing Training Program

**Martin Y. Silberberg**

2521 Palisade Avenue  
Riverdale, New York 10463

Telephone: (718) 549-4901  
Fax: (718) 549-4825

## **Resume of Professional Experience**

### **Summary of Qualifications**

Extensive experience and skills in project organization and management, people management, problem analysis, solution design and implementation, negotiation for agreement and strategic planning. Proven ability to organize and conduct complex projects with both technical and marketing components through the application of skills in planning, organizing, communicating and staff motivation.

### **Current Status**

Retired from IBM August 1991 to start my own consulting company, Creative Management Applications, Inc.

### **IBM Experience**

During an extensive career in IBM, I held a wide range of business management, product marketing, application marketing, strategic planning, software development and application development positions. Gained significant people and project management experience and training; managed both small teams of high-level staff professionals and development teams of up to 60 people; and worked both field and headquarters organizations. My family and I lived in Japan for three years with IBM. I also had considerable work experience with IBM country staff and organizations in Canada, Australia, Asia and Latin America.

Among the major accomplishments, I would note the following:

- ❖ Implemented the IBM/InterBold Agreement on ATM marketing in Latin America (1990/91)
- ❖ Developed a strategy for marketing IBM point-of-sale products in Latin America (1990/91)
- ❖ Defined and implemented the strategy for efficient electronic dissemination of marketing information, design tools and messaging capability to customers in Latin America. This required management of development teams in Toronto and Buenos Aires and coordination of multiple in-country planning and installation activities. (1988/90)
- ❖ Managed the operations of the six software distribution centers serving the Latin America and Asia Pacific countries. A particular challenge was to prepare for the announcement of the AS/400, which had some unique requirements. (1986/88)



- ❖ Developed and applied strategies for marketing high-volume products (personal computers, small systems and terminals) in Latin America and Asia Pacific. This included analyzing and adapting the brand marketing techniques of such companies as Procter & Gamble and General Foods. (1979/84)
- ❖ Managed the application development activities of a selected group of specialists assigned to work in Japan in key industry application areas. Was responsible for our efforts in the manufacturing, process, distribution and public sector industries. (1973/76)
- ❖ Managed the development of several major successful software packages for process control and computer simulation applications. (1966/73)

### **Creative Management Applications Inc. (CMA) Experience**

Since leaving IBM, I have been involved in a variety of projects consistent with CMA's business scope and objectives. Especially noteworthy are the following:

- ❖ Performed a detailed technical assessment of a software vendor's development projects that were experiencing difficulties; recommended and helped implement corrective actions; then designed and helped implement a successful technical, marketing and organization plan for the products.
- ❖ Took a lead role in the preparation of a comprehensive report for MITI on the evolution and status of the U. S. packaged software industry.
- ❖ Took a lead role in development of a strategic plan for an IS professional services firm.
- ❖ Developed and helped introduce/implement a set of position descriptions, project procedures and documentation standards for a software and services vendor that had outgrown its informal structure and was very much in need of procedures, better internal communications and controls.
- ❖ Managed the requirements definition and product options evaluation for automation of a medical group laboratory.

### **Education**

- ❖ Dr. Engineering, Yale University, 1957
- ❖ Masters in Engineering, Yale University, 1951
- ❖ BEE, Polytechnic Institute of Brooklyn, 1950
- ❖ Extensive management training in IBM (people management, project management, negotiation skills)
- ❖ Certificate in Management of Non-profit Organizations, New York University Summer Institute, 1991

### **Personal**

- ❖ Married, two daughters no longer at home; resident of New York State since 1976; served in the U. S. Army from 1954-1956; excellent health

**EDUCATION** College of Charleston, May 1986 - Bachelor of Science in Computer Science  
Andersen Consulting, April 1994 - Certified client-server developer of applications in FOUNDATION 2.0  
The Inteq Group, August 1995 - Certified in Data Modeling and Relational Database Design  
Developing in Java, April 1996 - Georgia Institute of Technology one day course  
Inside Jaguar and PowerJ, October 1997 - Sybase Inc. one day course  
Oracle 8.0 internals on Sequent's Quad SMP machine, April 1998 - 2 day course taught by OEMs

**EXPERIENCE**

- 3/98 - present Kaiser Permanente**  
*Principal Consultant*  
Member of the National Pharmacy Data Warehouse project utilizing my data analysis, database design, and programming skills. Gathered detailed requirements from Regions across the US. Used S-Designor to create physical models. Used C++ to write a very complex data scrubbing tool to edit data before being loaded into Oracle 8.0 tables. Used C++ to write all data load programs that feed the data scrubber.
- 4/97 - 3/98 MCI Telecommunications**  
*Project Manager / Lead Architect*  
Managed, architected, and developed WebForms, a 3-tier Intranet to process all commissions and bonuses for internal sales group. Project management involved requirements meetings, detailed proposal, budget, project plan, and five person resource management. Architecture consists of Java based thin browser clients accessing business objects written using PowerJ and Power++ hosted on a dedicated Jaguar server using jConnect to access data on a dedicated Sybase server. Used SQL-Programmer 2.0 and Sybase Transact SQL to develop complex stored procedures which utilized advanced SQL Pivoting techniques for query optimization to create custom financial reports for MCI/WorldCom merger.
- 6/96 - 2/97 Federal Express**  
*Principal Consultant*  
Architected and developed *Shipnet-2000*, a 3-tier client-server package responsible for \$1.5B in revenue that is designed to rate, route, label, and track all packages shipped by high volume customers. Wrote C++ class library to encapsulate all ODBC function calls into simple, easy to use interfaces. Used S-Designor to perform logical and physical database design consisting of 105 tables. Development was performed using Visual C++, Visual Basic, MFC, Access, Sybase, OLE and ODBC. Developed an Intranet to track software bug fixes during system testing phase using Website WebServer, HTML, CGI, Access, and Visual Basic.
- 6/95 - 5/96 Peachtree Software**  
*Database Architect*  
Performed entire database design for Apollo<sup>®</sup>, a new small business accounting product for Windows 95 and NT. Translated accounting requirements into logical and physical models for AR, AP, GL, Inventory, Sales, Jobs, and Payroll. Performed all DBA functions including proprietary strategy to create and authenticate individual databases for New Company Setup. Assisted programmers with writing SQL queries. Wrote all SQL views for the reporting engine. Programmed Sales Taxes, Finance Charges, and Shipping Methods GUI screens using a Single Document Interface. Programmed custom Tabbed Dialog and Wizard user interface controls. Used InstallShield to write installation programs. The development was performed using Sybase SQL Anywhere, S-Designor, SQL, ODBC, VISUAL C++, and MFC.

- 10/94 - 6/95 **Georgia Pacific**  
*Senior Consultant*  
Developed OLE Automation Servers for all C++ and Visual Basic programmers to perform common application services such as Error Handling, Message Display and Logging, Security, and Memory Management. The analysis was performed in JAD sessions. The class designs were performed using an iterative and incremental process using the Booch methodology. The class diagramming was performed using the Rational Rose CASE tool. The programming was performed using VISUAL C++, OLE 2.0, MFC, ODBC, SQL, Windows NT, Microsoft SQL Server, and Access.
- 4/94 - 9/94 **Andersen Consulting**  
*Senior Consultant*  
Developed VIRTUOSO II, a client-server cellular billing system for GTE. The *clients* were developed using VISUAL C++, C, and the Windows SDK. The *servers* were developed using UNIX, C, embedded SQL, SYBASE, and INFORMIX. Performed DBA functions to support database architecture. All work adhered to a strict, repository based, detailed design methodology.
- 11/93 - 3/94 **Lockheed**  
*Senior Consultant*  
Developed a client-server inventory management system for the F-22 fighter aircraft division. Used C, Windows, Unix, Sybase, Transact SQL, and DB-Library to develop applications that were used by major parts suppliers to access a DB2 mainframe database to provide 'Just In Time' inventory management.
- 10/90 - 10/93 **In Touch Inc.**  
*Project Manager / DBA / Programmer Analyst*  
Designed and developed a Television and Radio Information System using C, UNIX, embedded SQL, and INGRES. Wrote over 21,000 lines of C code and over 410 SQL statements for subsystems which included Inventory, Telephone Ordering, and Data Entry. Wrote 24 conversion programs in C to convert legacy B-tree file data to INGRES table data. Performed all DBA functions for PM including creating and populating tables, storage structures, implementing rules and stored procedures, and optimizing database performance.
- 7/89 - 9/90 **Automated Design Systems**  
*Programmer Analyst*  
Developed a Training and Enrollment System for General Motors to maintain and coordinate the training history of employees for 104 plant and office facilities. Developed Training History, Employee Skills, Tuition Assistance, and Print Controller applications using SQLWindows, C, Windows SDK, and Oracle.
- 1994 - 1998 **Database Technologies**  
*1998 - Internet Application Architect*  
Architected and guided the development of a Java based Internet application for I-Net Solutions Inc. that serves the Home Care Service industry.  
*1996 - Retail Product Architect*  
Developed EasyINN<sup>®</sup>, a Reservation Information System, for the Bed and Breakfast Industry. This retail product sells for \$149 to a target market of 21,000 B&Bs and INNs across the United States and Canada. The product is written for Windows 95 using VISUAL C++, C++, MFC, Crystal Reports, OLE Custom Controls, Sybase SQL Anywhere, S-Designor, SQL, and ODBC.  
*1995 - Non-Profit Product Architect*  
Developed PROGNOSIS<sup>®</sup>, a personal medical information system, for the CFIDS Association of America using VISUAL C++, C++, MFC, ODBC, and the POET object oriented database.  
*1994 - Management Consultant*  
Provided a thorough technical evaluation of ORACLE, SYBASE, INFORMIX, UNIFY, and PROGRESS database engines and application development environments. This evaluation was used by Satellink Paging Inc. to select a vendor for all new application development.

Specific Review Subjects

## A. Development

1. Organization and training of development people
2. Development methodology
3. Scheduled enhancements/customer commitments
4. Current maintenance activities
5. Current development projects
6. Testing and quality assurance procedures
7. Effort and cost records for development
8. Product release and update procedures
9. Installation procedures
10. Availability and procedures for international usability and service

## B. Technical Review

1. Supported platforms and systems for each product
2. Major features of the products -
  - functions performed
  - ease of installation and use
  - maintainability
  - audits and controls
  - security
- (P) 3. Development languages and special tools used
- (P) 4. Number of programs per product and lines of code
- (P) 5. Provenance of all program modules (where did code come from)
- (P) 6. Inclusion of proprietary notices in source and object modules, both current and previous releases
- (P) 7. Method of change control
8. Volume and magnitude of change history
9. Number of product releases being supported
- (P) 10. Structure of the code
- (P) 11. Internal system documentation level and updates
12. Documentation of specifications and design
- (P) 13. Prerequisites for running the products
- (P) 14. Access to source code
- (P) 15. Access to usage/demo of operational code
- (P) 16. Unit and system test cases

Note: (P) means that this is primarily a program review function while the others are management review

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# MYS MANAGEMENT SERVICES

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Appendix C  
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Date: April 16, 1998

*<The referenced enclosures  
have not been sent because  
they are so voluminous.>*

To: Burton Grad  
Burton Grad Associates, Inc.

From: Martin Y. Silberberg

Subject: Timbuktu Development Due Diligence

Reference: My memo to you of April 15, 1998

This memo includes and adds detail to the information, conclusions and recommendations in the referenced memo. It follows the outline of the Development due diligence check list used in the discussions with Shereef Nawar and Rodney Trugman.

## 1. Organization and training of development people

Enclosures 1 and 2 show the organization of the developers and testers, with a total of 42 developers (44 headcount) and 37 testers (38 headcount) plus 13 coops from Georgia Tech. The three managers (Barry Cole, Rodney Trugman and Bryan Jackson) report to Shereef, along with a technical adviser who carries out research activities for Development.

Most of the regular staff have been with the company for over two years. Shereef goes back to the beginning and Rodney has been with them for ten years. They said there was very little staff turnover and significant personal loyalty and identification.

There is no formal training for new hires except for their attendance at a customer (user) class that deals with function and usage. People are hired based on their resumes, references and personal contacts. Recruiters are used to interview for skill and personality match.

Skilled/experienced hires are assigned to project teams and less experienced hires start in the maintenance areas. Project teams are kept small, as the organization charts show, which allows for rapid integration of new people. Shereef said it was typically two weeks to productivity for skilled hires. Everyone participates in ongoing education; e.g. in Microsoft classes, as appropriate. These classes are held both on and off site.

There are no formal position descriptions but there are quarterly, documented performance reviews which deal with accomplishments over the prior quarter and goals for the

TMBKT2-1

coming quarter. Everyone in Development, including Shereef, participates in this process. Enclosure 3 shows Shereef's performance review for the fourth quarter of 1997. The person being reviewed does a self-evaluation first, which he sends to his manager. The manager then adds his comments and the package is sent to the next level manager for review. After review, the package is returned to the manager for discussion with the employee. This process has been in place for two or three years, is applied diligently and has proven to be effective.

You might notice that Shereef's review is a bit heavy on style, as opposed to measurable achievement. He said that the latter criteria get more emphasis with Development staff.

Promotion and salary increases are based on these reviews; i.e. on contribution.

## 2. Development methodology

All development, be it a new product or an enhancement, must start with a statement of requirements from Marketing; i.e. from a product manager. Shereef stated that he will do no work without a Product Requirements Document (PRD). Enclosure 4 is the PRD for RemoteWare for Windows NT, Version 3.3. Note that it has undergone revisions and updates as described on page 6. Development is involved in this definition and documentation. All parties must sign off.

Based on the PRD, Development then prepares a Design Document which describes the product or enhancement in some detail from a developer viewpoint. Enclosure 5 is a Design Document for the RemoteWare Enterprise Registry.

Based on the PRD and Design Document, the product manager and developers jointly prepare a Program Document which identifies the program content, team members and schedule, with key checkpoints. It defines all the steps that must be taken to get the product or enhancement out the door. The Program Manager, author of the document, is a product manager. Shereef said that there are weekly meetings to check schedules and content against this plan. Enclosure 6 shows the Program Document for RemoteWare 3.3. These documents are, of course, available in both hard copy and online.

All of this is quite good and the documents appear to follow some reasonably consistent format. However, no formal software design, programming, documentation or testing tools, standards or methodologies were identified. Much is left to the discretion and choice of team leaders. The result is inconsistency in quality and excessive long-term support dependency on the knowledge residing with individual developers.

A set of consistent tools, standards and methodologies should be defined, all developers and testers should be trained in their use and the disciplines should be ensured by Development management through monitoring and the existing developer/tester performance evaluation process.

As noted above, development teams are deliberately kept small, typically 4 to 6 people, 8 people maximum. This avoids the communication difficulties often encountered in large programming and testing teams. Shereef feels that there is good focus on tight communication and code integrity.

With regard to the testing process, Timbuktu has evolved to a hybrid organization in which testers are part of the development team but report to and are evaluated by a separate manager. The objective is to avoid the excessive "cooperation" that often occurs when both developers and testers are part of the same team, with the shared objective of getting the product out the door, and the sometimes excessive "contention" that results when they are not. Shereef feels that their system works quite well.

Testing is responsible for quality and adherence to the PRD. They are involved in reviewing the design, testing code and preparing a test plan. They perform an alpha test upon code completion consistent with a Test Journal prepared by one of the testers. Enclosures 7 and 8 are examples of Test Journals for the WorkObject Editor and Software Manager.

These are two very different documents in terms of depth and detail, which undoubtedly is related to the comparative complexity of the code being tested. However, it is my understanding that there are no formal standards for designing and documenting tests. As noted above there should be.

Note that beta tests are sometimes conducted at customer sites but not consistently. Given the diversity and complexity of the environments in which Timbuktu's products are used by customers, it is not possible to fully test new product and function in house. Yet there is no formal beta (customer) test as part of the development process. Beta test requirements should be identified and the appropriate sites (customers) should be selected and enlisted. Exceptions to the general rule should require approval at the VP or CTO level.

### 3. Scheduled enhancements/customer commitments

Enhancements are treated as outlined above with regard to requirements definition and the development/testing process.

Timbuktu rarely does a special enhancement for a specific customer, but will accelerate the availability of a particular enhancement to address a specific customer need. Note that no custom code is produced in development; that is done by the Integration Services staff (a group of about 12 people) in Customer Operations. They provide consulting and special support.

According to Shereef there are many enhancements in the pipeline now, many scheduled for preliminary release in June. The enhancements will add platforms, address performance, usage environment and scale requirements and add some functions. These are substantial enhancements. There are no new products in the pipeline.

After the initial release of an enhancement (or product), Development obtains and responds to customer comments and experience. There is, in fact, some ongoing contact between Development and customers via the customer briefing sessions that Marketing conducts. Depending on the content, Shereef and/or one of his managers will attend. According to Shereef there are one or two customer briefings each week. The agenda is defined by the customer. Enclosure 9 is the agenda for a briefing for AMP that was being held at Timbuktu headquarters on April 14. Note agenda items 2, 5 and 9 which relate to enhancements. (Also note agenda items 6, 7, 8 and 13 which relate to maintenance and quality and will be referenced below.)

#### 4. Current maintenance activities

Development is undergoing some significant changes at this time which are part of a maturing process that addresses the implications of the scope, complexity and broad customer base of Timbuktu's products. There is a particular focus on maintenance responsibility.

It appears that the focus prior to the beginning of this year was on being first to market with product and function. That is certainly understandable. Now other, quality related matters are receiving increased attention. That is the right direction and should be continued.

The key organization change is that third-level maintenance (repair) responsibility is currently being returned to Development. Prior to this year it was being done by a separate group in order to allow developers to focus on new product and function. The result was an increasing lack of the detailed knowledge needed to address issues that got through the first and second levels of customer support.



Now the developers who wrote the code and the testers who tested it will be involved in resolving problems. In its planning, Development will now allocate 15% of its resources, as a buffer, to maintenance activities

As a possible indicator of the importance of this change, note again items 6, 7, 8 and 13 on the AMP briefing agenda. CSG should review recent customer satisfaction surveys to see if these concerns are widespread.

In any case, this reorganization of the support function should be completed to ensure efficiency, responsiveness and customer satisfaction. Effectiveness in this context should be addressed in developer/tester performance requirements and accomplishments, with emphasis on first-level (team leader) responsibility. This should improve quality in the development and testing phases as well as in the maintenance operations.

There also appears to be need for enhanced (formalized) communication between Development and Customer Support on maintenance issues. Possibly because of the prior organization, there appeared to be a lack of information in Development about the number, type and significance of customer reported programming bugs, documentation errors or usage problems being handled at the first and second support levels. Enclosure 10, however, does show the list of problems currently in the backlog and how they are currently being handled. Of the 227, 102 are, in effect, being deferred. The rest are being handled as noted.

Enclosure 11 provides detail on the eight problems that have gotten through the first two support levels and are now being handled by Development. It is a short list and the most recent addition was made on April 6, 1998. If the first and second level support teams are not holding onto problems, this is good news.

#### 5. Current development projects

Please see section 3 above.

#### 6. Testing and quality assurance procedures

Please see sections 2 and 4 above.

#### 7. Effort and cost records for development

There is no formal time-sheet tracking of development activities. Apparently costs are estimated based on the actual schedules and number of developers/testers involved, by phase.

#### 8. Product release and update procedures

Please see sections 2, 3 and 4 above. When a release or update has been completed and tested, the information is put on Timbuktu's web page. Apparently customers can opt for an early release or may wait for the formal release.

#### 9. Installation procedures

According to Shereef, many customers, over 50%, can install the products by themselves with the information/guidance provided. However there is increased attention on improving installation procedures and on helping OEM's include Timbuktu products in their offerings. Note the group shown on the organization chart as being dedicated to installation.

#### 10. Availability and procedures for international usability and service

Timbuktu has offices in the UK and, a new one, in Germany. International sales provide 15 to 20% of their revenue. Most of the products, nevertheless, are in U.S. english. Some, but not all, have client-oriented components in UK english, German and French as well. There are plans to expand internationally and there is double-byte capability.

# **Due Diligence Review**

or

*XcelleNet Software Inc.*

April 14, 1998

By Gary McSwain

## Technical Review

### Supported platforms and systems for each product

A documentation sheet was provided with the name of each product and the operating system they ran on including DOC, OS/2, Win3.1, Win95, and WinNT. The primary products distributed are:

1. RemoteWare
2. Software Manager
3. Inventory Manager
4. AntiVirus Manager
5. Backup Manager
6. RemoteWare Express
7. Tivoli

### Major Features of the Products

#### 1. Functions Performed

A brief overview was provided by Shareef detailing the fundamental features of each product. A more descriptive overview was provided in the form of marketing materials. These have been faxed to Burt.

#### 2. Ease of Installation and Use

All of the products that are sold, use InstallShield for their installation program. This is an industry standard installation tool that most users are familiar with. The use of InstallShield provides for consistency across products as well as code sharing for the installation and software distribution team.

#### 3. Maintainability

The RemoteWare product, which was written in C, would be the most maintainable product in the line due to superior documentation, readable code, consistent coding standards, and fundamental code use. The RemoteExpress product, which was written in C++, would also be a very maintainable program due to average to better documentation, reasonably consistent coding standards, good use of Try/Catch, good use of ASSERTs, good use of IFDEFs, and minimal use of Macros that can be difficult to debug. The other products (Software Mgr, Inventory Mgr, AntiVirus Mgr, Backup Mgr, and Tivoli) would all be difficult to maintain to the casual user/developer due to a severe lack of documentation, inconsistent coding standards, minimal type checking, and minimal memory checking.

#### 4. Audits and Controls

The question of audits and controls was posed and the answer given is that there is currently no audit process in place on a widespread scale beyond the developer and perhaps his team members. This lack of an auditing process could explain why the code was poorly documented in the programs mentioned above.

In respect to controlling the versioning of the software, the Microsoft SourceSafe product is used exclusively. This is an excellent tool and is being used on the entire product line, Every source module was observed to be in SourceSafe including documentation.

### **5. Security**

All access to all the program and data servers was via a login id and password. Each of the servers was secured in a locked room. Building security was normal with a badge required for entry into all sensitive areas. All programmers have access to the Internet and are restricted very little in what they can access and bring down to their local machines. One programmer was identified as being fired recently for spending too much time on the Internet.

### **Development languages and special tools used**

There are several programming languages used for their development process:

1. Microsoft C 6.0 - DOS product compiler, RemoteWare compiler
2. Microsoft Visual C++ - Software Mgr, Inventory Mgr, AntiVirus Mgr, Backup Mgr, and Tivioli
3. Symantec Café Pro - Prototyped JAVA product
4. SCO Unix C Compiler - RemoteWare for SCO Unix product
5. Microsoft IDL Compiler - Compiles all Interface Definition files
6. Microsoft HELP Compiler - Compiles all RTF and HPJ files

### **Number of programs per product and lines of code**

A general count in SourceSafe was done for each product group and no more than 40 source files were counted to create each product.

### **Provenance of all program modules (where did code come from)**

All of the programs listed above were written by company programmers except for the following products that were used as 3<sup>rd</sup> party libraries for individual products:

<u>Software Product</u>	<u>Product Company</u>
Spell Checker	Linguistic Technologies
ODBC Lib	Visigenic
Q&E Lib	Q&E Software
DosLibs	Lead Technologies
Software Manager	Wise Technologies
BackupTech	Core Data
InstallShield	Stirling Software

CommonGround	Hummingbird Software
Microsoft	MFC, C++, IDL, HLP
OptecSort	OPTEC Software
BasicScript	Summit Software
LanAccessOnline	Tivoli
RemotelyPossible	Avalon
AntiVirus	McAfee
Equipted	McAfee

### **Inclusion of proprietary notices in source and object modules, both current and previous releases**

With the exception of the above software libraries that are used to develop the products, there was only one program, Express, that used source code from another company. It was from the Microsoft Systems Journal magazine and was clearly documented.

### **Method of change control**

Microsoft SourceSafe is used for all change control. All software appeared to be completely in uniform packages that were easy to traverse and discover.

### **Volume and magnitude of change history**

There were considerable changes to the core modules of each product. The changes were performed by a variety of programmers, but no more than four different programmers for any module. The only exception was RemoteWare which had about eight identifiable programmers who had made changes.

### **Number of product releases being supported**

This can be answered by the "Supported platforms and systems for each product" section above

### **Structure of the code**

This can be answered by the "Major Features of the Products/Maintainability" section above. Suffice to say that the core RemoteWare product has excellent structure that shows skill was used and care was taken with all of this code. All of the C++ products show a lack of skill and poor to negligent documentation.

### **Syntax of the code**

None of the code deterred from a common syntax. The primary deviation between software products was in the use of Begin/End braces {} for IF, SWITCH, FOR, DO, WHILE, and CASE statements. The lack of consistency could create readability problems for casual programmers.

### **Coding standards of the code**

No coding standards seem to be in place. It was expressly stated that "Coding standards are not low lying fruit on the tree" meaning that it was not something that was seen as

immediately necessary but hoped for the future.

#### **Internal Documentation of the code**

The core RemoteWare product has excellent documentation for all program headers, function headers, inline comments, and tricky code sections. All of the C++ products show a severe lack of documentation with the exception of the Express product which had fair documentation.

#### **Internal documentation updates strategy**

The core RemoteWare product used an consistent update strategy of placing the date, programmer initials, and a description of the update at the top of the file. All files that were checked into SourceSafe had at least a minimal comment at the bottom of the file when a significant change was made.

#### **Documentation of specifications and design**

The Marketing department creates a PRD - Program Requirements Document that is fed to the programming team which creates a detailed design document which programming assignments are made from. This was one of the better areas that was observed. The documentation was easy to read and reasonably thorough.

#### **Prerequisites for running the products**

All products have a specification sheet detailing the memory, hard disk space, and network protocol requirements for successful installation and use.

#### **Access to source code**

All of the source code was easily accessible using SourceSafe

#### **Unit and test system cases**

All test cases are outlined and are stored either in SourceSafe or in a Notes database.

## Software Review

All of the software programs listed below were reviewed in SourceSafe to reveal specific programming, documentation, design, and functionality issues of each program. A bulleted summary is provided for each program category.

1. Java
2. RTF
3. HPJ
4. RUL
5. DOS C
6. DOS H
7. Unix C
8. IDL
9. ODL
10. DEF
11. CDialog derived base classes
12. CDialog derived H class definitions
13. RemoteWare C files
14. RemoteWare H files
15. Software Manager C++ files
16. Software Manager H files
17. Inventory Manager C++ files
18. Inventory Manager H files
19. AntiVirus Manager C++ files
20. AntiVirus Manager H files
21. Backup Manager C++ files
22. Backup Manager H files
23. RemoteWare Express C++ files
24. RemoteWare Express H files
25. Tivoli C++ files
26. Tivoli H files

### 1. Java

- No header documentation at top of file
- Begin/End brace match - good
- Comments at top of each function
- Parameters definitions
- Return codes defined
- No brace for single OF statements
- Inline docs within code at specific logic points
- multiple use of Public, Private, Protected for each variable and function declaration

### 2. RTF



- All tags in proper place
- All docs look in order
- No comment but none expected

### 3. HPJ

- All includes for mapping in place
- no comments but none expected

### 4. RUL

- Comment header at top of file with company name
- Ordered declaration of data types - string, bool, long, etc
- All function prototypes - according to function "likeness"
- Individual comments for each function call - almost every line
- Good use of IFDEFs
- Function header comment section
- Good organization of code
- Clearly work of senior programmer

### 5. DOS C

- Excellent comment header at top
- All changes documented
- Command line options explained
- Orderly explanation of #include, #define, and all other sections
- Minimal function header docs
- No use of Free after any of the Mallocs
- No braces for single IF
- Orderly match of Begin/End brace for If, Switch, and For
- Cluttered, but good use of Ifdef around specific code
- Optimized string manipulation usage
- No explanation around Switch/Case
- Minimal doc on data structure definitions

### 6. DOS H

- Header section at top
- Detailed explanation of use of H file in other C modules
- Detailed explanation of use of data structures
- Orderly separation of function and variable declarations

### 7. UNIX C

- Use SCO C compiler
- File definition at top of file
- Command line arguments explained
- Revisions section - moderate docs
- All prototypes but "fair" organization

- Global variable with one line comments
- Default section of argv/argc
- Some inline docs for specific code at point of change
- Section header above each function, but minimal docs
- Liberal but proper use of IFDEF
- Single line If with no braces
- Orderly use of braces for If, Switch , and For
- No comments for Switch/Case
- Parameter and Return code explained in comment
- Not all functions return code were checked - normal
- Malloc used but memory not freed
- Malloc return code checked - good

#### **8. IDL**

- Standard file
- No tweaking of generated file

#### **9. ODL**

- System generated but no tweaks

#### **10. DEF**

- Standard file with no tweaks

#### **11. CDialog derived - C++ class**

- Minimal docs - function header, inline
- No docs at top of file
- Good use of Try/Catch
- General but common use of casting

#### **12. CDialog derived - H class**

- No organization of these files other than system generated features
- No comments of anything in H file

#### **13. RemoteWare - C**

- Excellent comments at top of file
- Small coincide Main() with good use of function calls
- Function header - no docs about return types or parameters
- very few inline comments
- Little to no verification of STDIO function calls - normal
- Inline docs of program changes - matches top docs
- Malloc with no free - memory leaks?

#### **14. RemoteWare - H**

- Good use of documentation

- Good layout of variables and function prototypes
- 15. Software Manager - C++**
- Good use of comments throughout code
  - Inconsistent indents {}{ on If, switch, case, For
  - Parameters are not documented
- 16. Software Manager - H**
- Multiple inheritance of 3 base classes
  - Constructor and destructor defines
  - no comments
- 17. Inventory Manager - C++**
- Little to no documentation
  - Average organization
  - General use of {} braces
  - Try catch implementation
  - ASSERT use throughout
- 18. Inventory Manager - H**
- No comments
  - Standard comments from Wizard class generation
- 19. AntiVirus Manager - C++**
- Uses mostly Visual C++ derived classes
  - Little to no additional docs
  - Largest file had NO header, function, or inline comments
  - Non standard use of braces {} in IF, For, Switch, and Case
- 20. AntiVirus Manager - H**
- No comments
  - Disorderly structure
  - Multiple embedded class declarations
- 21. Backup Manager - C++**
- Document header at top with overview
  - Better use of braces {}
  - DLL library loading verification
  - Function header blocks
  - TRACE used throughout
  - Excellent trouble shooting on DLL calls
  - Writelog used consistently
  - Good use of Try/Catch

## 22. Backup Manager - H

- Well organized
- Structure differs from other H files but still OK

## 23. Express Manager - C++

- Good header at top
- Revisions noted
- Prototypes all exist but not lined up with any sort of organization
- Function headers with no documentation
- Good use of braces {}
- Minimal use of CALLBACK functions

## 24. Inventory Manager - H

- Good documentation at top when appropriate
- Disorganized function declarations
- Not according to return type
- Consistent use of Const
- Incline comments based on necessity

## 25. Tivoli C++

- Some code from Microsoft Systems Journal
- Good organization
- Consistent use of braces
- Minimal but adequate comments
- Consistent use of braces {}
- Adequate optimization for stdio functions

## 26. Tivoli H

- Minimal comments
- Normal prototypes
- Ho headers at top

## Concerns and Risks

The products that are written in C have a superior amount and detail of documentation. These programs are well structured according to commonly accepted programming standards. They read well which provides for speedier debugging and code repair.

The C++ programs do not come close in quality or structure to the C programs. This does not mean that functionally they are inadequate. It simply means that a new user or programmer will have a longer time required to repair or enhance any of these programs.

In order to alleviate this situation in the C++ programs, it would be advisable to get the C++ program authors to spend all necessary time to go through each of these programs and document the overall and core functionality of the programs. All unnecessary comments should be removed. These comments are typically the ones that Visual C++ places in the source generated files.

All of the programs should be run through BoundsChecker and the results published to reveal any known bugs or any serious defects.

A number of coop programmers have been used to do some amount of programming. All of their code should be found and reviewed. The review would be to look for any possible inclusion or use of non standard code that could not be found or revealed in a cursory review.

The testing team has been integrated into the development team. This is usually good, but can have a side effect of a tester closing their eyes if too much intimacy is allowed.

Some definitive level of coding standards needs to be put in place as soon as possible. The lack of coding standards and emphasis thereof is a real concern that needs to be addressed.

# Effectively managing the unique needs of today's remote and mobile work force is a real challenge that cannot be met with traditional LAN-based systems management tools.

Think about traditional LAN-based systems management tools. They are based on the assumptions that 1) access to network systems is continuous 2) bandwidth is fast, cheap and reliable and 3) that support resources are local. Now, think about the realities of remote computing. Remote and mobile users 1) are only connected occasionally, 2) are connected typically over slow, unreliable, metered connections and 3) typically place the heaviest burden on an organization's IS resources. These three characteristics make supporting remote users costly. In fact, the Gartner Group, a leading industry analyst, estimates that the five-year cost of ownership of a typical remote user will be 58% higher than for their LAN-based equivalent. The difference is driven by significantly higher support, administration and end-user costs.

Obviously, managing and supporting remote users requires a new architectural approach — one that focuses on keeping these users productive when they're offline and provides an efficient connection when they're online. Therefore, you need a solution that allows you to effectively manage remote systems and applications, reduce total cost of ownership, and maximize end-user productivity.

Enter RemoteWare®  
XcelleNet's Remote Systems Management software is specifically optimized for remote and mobile users who connect intermittently over a slow speed connection. With more than 1600 customers and over half a million users, RemoteWare is a proven success.



So, how does RemoteWare effectively manage systems? Simple. RemoteWare's sophisticated session automation and scheduling capabilities allow you to completely control exactly what happens during a communications session. RemoteWare's unique "Queued Event Architecture," a client-agent-server technology, provides the foundation for a highly optimized solution. The architecture incorporates agents that automatically queue and stage system events, including software upgrades, application data, new antivirus scripts, and the ability to repair corrupted or missing files. It allows remote users to work offline, and then once a connection has been established, it minimizes time and bandwidth requirements. RemoteWare makes the best use of limited bandwidth and unreliable connections with automated data compression, checkpoint restart to resume failed transfers at the point of failure rather than from the beginning, and incremental updating to transfer only updated or missing files. When the connection is terminated, changes are automatically applied, you are provided with a comprehensive set of management information and alarms, and your remote PCs have been fully serviced, including systems maintenance applications and file and data updates.

How does RemoteWare reduce the total cost of ownership? Since XcelleNet's approach is optimized for intermittent low bandwidth connections, it dramatically minimizes administration, operating and support costs, and improves overall productivity. Studies suggest that an effective remote systems management solution allows sales people to divert time spent from administration to face-to-face selling, resulting in improved productivity of 25-100%. XcelleNet's customers have realized significant improvements, including the ability to support 2 to 3 times more remote users, plus saving up to 80% on communication costs.

## Software Distribution

RemoteWare automates the delivery and updating of both packaged and in-house developed software to remote users and provides you with the ability to schedule software updates to occur automatically, requiring no user intervention.

- Automated centralized management and distribution of applications
- Push or pull delivery of software
- Supports packaged software, custom applications, Java® applications, ActiveX controls, and Plug-ins
- Offline program installation and execution
- Delivery confirmation and information tracking, logging and reporting
- Data compression, checkpoint restart and incremental updating

## Asset & Configuration Management

Managing the hardware and software assets of remote systems can be challenging, yet having this knowledge is vital to providing quality support. RemoteWare provides you with the ability to manage client configurations through the following functions:

- Automated retrieval of key desktop software and hardware inventory, including support for DMI
- Reporting of inventory into ODBC-compliant database
- Supports rules-based software distribution
- Offline scanning and compression of inventory
- Provides detailed client information for asset tracking, client diagnostics, or software distribution

## Content & Applications Management

The success of your support strategy for remote and mobile users depends on accurate, timely and efficient distribution of information from the corporate network to the field. RemoteWare enables:

- File Transfer Services — collection, management, and distribution of a wide variety of content and application files
- Subscription and Publishing
- Web Content Retrieval and Delivery
- Messaging/Mail Delivery

## Diagnostics & Recovery

Troubleshooting and maintaining the integrity of remote systems can be time consuming and costly if they must be removed from the field for servicing. RemoteWare provides remote control, antivirus and backup functionality:

- Remote Control
  - Ability to perform diagnostics, troubleshooting and training from a remote location without client notification
- Antivirus
  - Automated distribution of up-to-date virus signatures to clients
  - Centralized management and reporting of virus scanning, detection and eradication
- Backup and restore capabilities
  - Efficient, centralized file backup facility for distributed clients
  - Innovative "byte-level" change detection engine that reduces incremental backup delivery and storage requirements by as much as 99%
  - Granular control of multiple backup sets and their revisions from either the server or the client

## Event & Alarm Management

With RemoteWare, you define the limits and are automatically notified of critical system events, providing the ability to:

- Monitor and report client status information
- Specify user-defined alarms and trigger associated events
- Maintain detailed logs and reports of events and messages
- View system-wide activity via dynamic status screen

## Extensions for Microsoft & Tivoli Systems Management Solutions

RemoteWare extends the enterprise and LAN-based systems management functionality provided by Microsoft's Systems Management Server and Tivoli's TME 10™ (Tivoli Management Environment) products to remote and mobile users.

- Manage remote systems in addition to LAN-based systems from Tivoli or SMS console

## Technical Specifications

### Communications Support

- Supports TCP/IP, IPX/SPX, Async, and RLA/PPP protocols
- Supports VSAT, ISDN, LAN, CSC, CDPD, GSM and other transports

### Client Support

- Windows<sup>®</sup> 3.x, Windows 95, Windows NT<sup>®</sup>, and DOS

### Server Requirements

- Microsoft Windows NT
- Pentium-based system
- 64 Mb RAM

### Client Requirements

- Windows 3.x, Windows 95, Windows NT, and DOS
- Prerequisite: RemoteWare Server

## About XcelleNet

XcelleNet, based in Atlanta, Georgia, is the leading provider of systems management tools for remote users. These tools effectively manage remote systems, reduce the total cost of ownership, and maximize end-user productivity for manufacturing, retail, financial services and healthcare companies around the world. Look at what the industry experts and our own clients are saying about XcelleNet:

"RemoteWare handles the day-to-day management of remote systems so Chick-B-A<sup>®</sup> can focus on growing and improving it's business."

- Mike Erbrick, Information Technology, Chick-B-A

"Without RemoteWare, the kind of immediate responsiveness that has propelled our growth would have been impossible."

- Paul Brown, Vice President, Enterprise Messaging, Countrywide Home Loans, Inc.

"Remote computing is an environment all its own, and requires specialized tools for managing the information exchange, the applications and the computers themselves. XcelleNet has specialized in this environment. This collaboration between XcelleNet and Tivoli adds important capabilities to Tivoli TME 10 while offering enterprise users a more integrated platform for managing user systems."

- John Mann, Senior Analyst, Yankee Group

"I believe that a mobile systems management solution is a reality today rather than an undelivered desire of tomorrow. As the mobile sector continues to grow, the ability to manage remote systems is becoming even more critical. This technology has been perfected by XcelleNet."

- John Dunkle, Workgroup Strategy Services



REMOTE SYSTEMS  
MANAGEMENT



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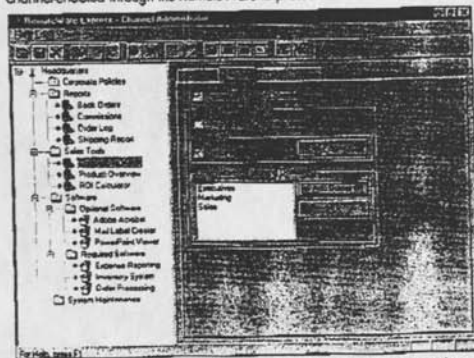


## RemoteWare Express Web-Based Solutions: Software & Content Management for Remote Users

For today's IS departments, using the corporate intranet to deliver information and software applications is a challenge. An even greater challenge arises from extending this use of the intranet to remote and mobile workers. These users are at a distance and on the move. They most often rely on limited-bandwidth asynchronous communications for their intranet access, and they are pretty much on their own when it comes to downloading, installing and maintaining software applications. It's a combination that can be costly and inefficient.

**Enter RemoteWare Express™.** RemoteWare Express is a Web-based product line currently consisting of two products: Software Manager and Session Manager. RemoteWare Express efficiently and securely manages software distribution and content delivery to remote users via corporate intranets or the Internet. Unlike other software distribution tools, RemoteWare Express is specifically designed to work in the remote user's environment, where connections are often slow, unreliable and expensive. And RemoteWare Express provides IS managers with powerful capabilities to manage the flow of information and applications between the central site and remote users, eliminating uncertainty and ensuring a consistent level of support across the enterprise.

RemoteWare Express significantly simplifies and automates the operations and procedures necessary to manage remote user systems via the corporate intranet. Using a centralized "transmitter", RemoteWare Express enables the system administrator to define delivery "channels" for software or information distribution. Through the RemoteWare Express Channel Administrator, channels can be made available for user subscription ("pulled"), or can be "pushed" to users by the system administrator. In either case, channel refresh schedules can be individually defined to ensure that information and applications are always up-to-date. The user can view these channels in one of three ways: from a browser, through Channel Viewer (a familiar Windows® Explorer-style interface), or within the context of custom applications, which can be channel-enabled through the RemoteWare Express API.



The Channel Administrator allows system administrators to define and manage secure software and content delivery channels for specified groups of users.

## RemoteWare Express Key Features:

### Optimized for Dial-up Users

- Differential download technologies eliminate unnecessary transfers, sending only that content which is new or revised
- End-to-end data compression of transmitted information
- Pre-transmission compression and caching of frequently transmitted files
- Checkpoint restart automatically resumes interrupted transfers from the point of failure, rather than starting over from the beginning
- Built-in error checking and verification that the file transferred matches the master copy before writing to disk
- Automated intelligent operations save end-user time

### Security Protects Sensitive Information

- Microsoft® RSA-based data encryption enables system administrators to protect specific channels during transmission
- Password protection of designated channels limits access to authorized users only

### Scalability Supports Large Numbers of Users

- Servers capable of handling hundreds of concurrent sessions supporting millions of user transactions per day

### System Logging and Status Provides Real-Time View and Comprehensive History

- Detailed logging and reporting allows administrators to track system events and proactively troubleshoot potential problems
- Dynamic status screen provides administrators with real-time view of system-wide activity

### Web-Friendly for Easy Integration

- Works in familiar browser environments, such as Microsoft Internet Explorer, Netscape Navigator® and most other Windows-based browsers
- Automatically generates required HTML to activate Web pages
- Easily integrates information into new or existing Web page designs
- Users can simply visit a Web page or click on a hyperlink to initiate information download

### Channel Viewer Offers Alternative User Interface

- Users can view all available channels and scheduling from an Explorer-style interface
- Users can schedule the frequency with which software packages and content are serviced
- Users can subscribe to software packages to be installed and continuously monitored for updates



### Minimum System Requirements

Server: Microsoft Windows NT® 4.0 Server, 32 MB of RAM, 15 MB free disk space

Browser Client: Microsoft Internet Explorer 3.0 or higher, Netscape Navigator 3.0 or higher or any browsers that support Helper applications running Microsoft Windows NT 4.0 Workstation or Server, Windows 95 (with Service Pack 1 or later), or Windows 3.1 (Session Manager Only), 4 MB of RAM, 225 KB free disk space

Channel Viewer Client: Microsoft Windows NT 4.0 Workstation or server, Windows 95 (with Service Pack 1 or later), 4 MB of RAM, 1.5 MB free disk space

A free evaluation copy of RemoteWare Express can be downloaded from the XcelleNet Web site at <http://www.xcellenet.com>



## About XcelleNet

XcelleNet, based in Atlanta, Georgia, is the leading provider of systems management tools for remote users. These tools effectively manage remote systems, reduce the total cost of ownership, and maximize end-user productivity for over 1600 companies, supporting approximately 550,000 users, in a variety of industries around the world.



1-800-322-3366

[www.xcellenet.com](http://www.xcellenet.com)

+44(0)1494-558111



XcelleNet, Inc.

Corporate Headquarters, USA: 5 Concourse Parkway, Suite 850, Atlanta, GA 30328 / Tel: 770-804-6100, Fax: 770-804-8102 / <http://www.xcellenet.com>

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Fax: +44(0)1494-558155/Email: [ukinfo@xcellenet.com](mailto:ukinfo@xcellenet.com)

Canada: 1200 McGill College, Suite 1100, Montreal, Quebec H3B 4G7 / Tel: 514-393-8546, Fax: 514-393-8023

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RemoteWare For OS/2	Number of Orders	Quantity Purchased	Sunset Candidate
1 RW Server For OS/2	1334	1718	Low
2 RW Cluster For OS/2	269	279	Low
3 RW Workstation Option	284	332	Low
4 RW Portable Option	169	644	Low
5 RW Basic Client - Dos /Win/ OS/2	924	330653	Low
6 RW Basic Client - 4680/4690	22	4283	High
7 RW Basic Client - Routing	18	118	Medium
8 RW Basic Client - Macintosh	29	1000	High
9 RW Basic Client - UNIX	97	14112	Low
10 RemoteWare Basic Client - LAN	139	17674	Low
11 RemoteWare Basic Client - VMS	20	8950	Medium
12 RemoteWare Mail Administrator	340	334	Low
13 RemoteWare Mail Client	340	162998	Low
14 RemoteWare Mail Client - UNIX	2	10	High
15 RemoteWare X.400 Gateway For OS/2	37	37	Low
16 RemoteWare Mail Fax Support Option For OS/2	14	14	High
17 RemoteWare Desktop Administrator	158	158	Low
18 RemoteWare Desktop Node	257	86187	Low
19 RemoteWare Forms Editor	52	52	Low
20 RemoteWare Forms Node	394	141767	Low
21 RemoteWare Subscriber Administrator	94	94	Low
22 RemoteWare Subscriber Node	184	64181	Low
23 RemoteWare Documents Editor	29	29	Gone
24 RemoteWare Documents Node	110	20664	Gone
25 RemoteWare Application Node	79	12699	Low
26 RemoteWare Application Server	86	92	Low
27 RemoteWare Application Tool Kit	76	98	Low
28 RemoteWare Extended Client For OS/2	322	119468	Low
29 RemoteWare Extended Client For OS/2 Additional Users	30	26458	Low
30 RemoteWare Developer's Kit For OS/2	466	541	Low
31 RemoteWare Mail Transport Option	32	32	Gone 4/1/98
<b>RemoteWare For NT</b>			
32 RemoteWare Server for Windows NT	755	1025	Low
33 RemoteWare Cluster For Windows NT	145	147	Low
34 RemoteWare Basic Client For Windows NT (Windows, DOS)	710	305507	Low
35 RemoteWare Basic Client - OS/2	0	0	Low
36 Microsoft Exchange Gateway Option	73	73	Low
37 RemoteWare Extended Client Add-on Pack	320	128739	Low
RemoteWare Workshop			
RemoteWare WEB Offlien			
38 RemoteWare Subscriber Client	0	0	Low
39 RemoteWare Managed Client	36	15748	Low
40 RemoteWare AntiVirus Manager Client	21	9535	Low
41 RemoteWare Software Manager Client	29	18045	Low
42 RemoteWare Backup Manager Client	23	8912	Low
43 RemoteWare Inventory Manager Client	7	6420	Low
44 RemoteWare Developer's Kit For Windows NT	148	169	Low
45 RemoteWare Agent for Microsoft Mail Transport	6	6	Gone 4/1/98
46 RemoteWare Replication Agent for Lotus Notes	87	44162	Medium
47 RemoteWare Essentials For Lotus Notes	3	3	High
48 RemoteWare Data Exchange Agent	56	29750	Gone
49 Client Multi-Language Support	1	450	Low
50 Microsoft SQL Server	12	13	High
51 RemoteWare Plus for Tivoli	0	0	Low
52 NT - Site License	1	1	Low
<b>RemoteWare Express</b>			
53 RemoteWare Express Session Manager Server	7	7	Low
54 RemoteWare Express Software Manager Server	3	3	Low

" " Document Manager  
 " " Channel Manager  
 " " Mail Manager  
 " " News Manager

Third Party Software Used in RemoteWare

Source Company	Source Product	Where Used	Used For
InstallShield	InstallShield 3	All 3.x products	Installation
Hummingbird	Common Ground	Subscriber for 3.x	Common View Format
LeadTools	LeadTools	Workshop 3.x	Render Graphic Images
Tivoli	Tivoli Plus	Tivoli Plus Module	Tivoli Plus
Optec	Optec-Sort	Exchange Directory Synchronization	Sorting
Summit	Basic Script	3.x Basic Client, DXA	Scripting
Intersolve/Q+E	QELIB	FORMS 2.5	Database access
Linguistic System Licensing	Proximity	Mail 2.5 Client	Spell Checking
RETIX	RETIX GATEWAY	X.400 Gateway for Mail 2.5	X.400 gateway
Intersolve/Visigenic	Visodbc Driver Set	DXA	Database access
Network Associates/McAfee	AnilVirus	AV Manager	Virus Scanning
Network Associates/McAfee	Equip	Inventory Manager	Inventory Scanning
CoreData	Backup	Backup Manager	Client Backup/Restore
Avalan	Remotely Possible	RemoteWare 3.x	Windows Remote Control

Wise

Wise

Software Manager

Builds installation/tratches

AUGUST '98

XCALLENET

**ALSTON & BIRD LLP**

One Atlantic Center  
 1201 West Peachtree Street  
 Atlanta, Georgia 30309-3424  
 (404) 881-7000  
 Fax: (404) 881-7777 Telex: 54-2996

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<b>TO:</b>	Bart Grad fax 203-222-8728
<b>FROM:</b>	Bob Barker <del>203</del> 404-881-7094 (phon)

**MESSAGE:** Sent Acquisition Memo by email

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977149:lkj  
965802-010-008  
4/13/98

To: Sina R. Hekmat, Jr.

STERLING COMMERCE

Re: Technical Software Evaluation

The licenses of third-party software that is used in Timbuktu's licensed software typically require use of the third-party's copyright notice and other markings. It is my understanding that the technical analysis of Timbuktu's software will include an inspection to determine whether the required copyright notices, trademarks and other marking are being used as required by the third-party licenses.

The April 9, 1998 draft of the proposed agreement and plan of merger defines the third-party software used in Timbuktu's software as the "Licensed Software," and a list of these programs is to be set forth under the caption "Licensed Software" of Section 4.1(h)(i) of the Disclosure Memorandum. The licenses for all of these programs should be checked to determine what obligations they impose on Timbuktu to use a copyright notice, trademark or other notice of the licensor.

As of the present time, I have reviewed seven (7) third-party licenses for Licensed Software. These agreement are listed below, and Timbuktu's marking or notice obligations in each is described.

1. Q+E Software, Inc. Database Library Distributor License Agreement

Paragraph 4.1 provides that "any publication of Licensee Applications will contain a copyright notice in the name of Q+E Software, and the copyright notice encoded in the QELIB Drivers shall be reproduced with the QELIB Drivers."

The term "Licensee Applications" is defined to mean the following two classes of software products developed by Timbuktu: Class I Licensee Applications shall mean self-standing applications containing QELIB Drivers, and Class II Licensee Applications shall mean add-in products containing QELIB Drivers that are intended to add database capabilities to other applications in the licensee's product line.

2. **RETIX North American OEM Program License Agreement**

Paragraph 8.3 is entitled Preservation of Notices and provides, in part, as follows:

"Appropriate copyright notices shall be placed on the materials supplied by RETIX and shall be embedded in the Source Form, Object Form, and Master Binary Licensed Programs, and such notices shall be retained on full or partial copies made by LICENSEE. LICENSEE agrees to reproduce and include any notices, including any proprietary notices, copyright notices, and restricted rights legends, appearing thereon."

Paragraph 8.4 provides as follows:

"For all Binary Form and other sublicensed executable versions of LICENSEE'S products which incorporate RETIX Object Form, LICENSEE agrees to private label such end user products."

3. **Summit Software Company BasicScript License Agreement**

Paragraph 4(e) provides that Timbuktu "shall include on the credit's page of the End User Documentation and in at least one dialog box within each Product in which the Software is included the following notice "Portions ©1992-1996 Summit Software Company."

The term "Product" is defined to mean any of Timbuktu's computer software products described in Exhibit A that incorporates Summit's software. Timbuktu's software described in Exhibit A is as follows: "RemoteWare 3 Server, RemoteWare 3 Basic Client, RemoteWare 3 Extended Client, RemoteWare 3 Developer's Kit."



Summit's software that is licensed under the agreement is known as BasicScript 2.2 for Windows and BasicScript 2.2 for Win32.

**4. Value Added Reseller Agreement for Visigenic Products**

Paragraph 4 provides, in part, as follows: Timbuktu "will not remove, or allow to be removed, any VISIGENIC copyright, trade secret, or other proprietary rights notice from any VISIGENIC PRODUCT. Timbuktu will display on the APPLICATION BUNDLE splash screen and in the credit's page of the APPLICATION BUNDLE documentation "Portions of this product ©1994-1996 Visigenic Software, Inc."

Visigenic product is defined in paragraph 1(C) to mean the VISIODBC DRIVER SET, the DB2 VISIODBC DRIVER and any other software provide by VISIGENIC under the Agreement.

The term Application Bundle is defined in paragraph 1(E) to mean the VISIODBC DRIVER SET and/or the DB2 VISIODBC DRIVER packaged in combination with one or more of Timbuktu's Products.

**5. Proximity Technology, Inc. Linguistic System Licensing Agreement**

The marking requirements of this license are set forth in paragraph 9.3, which provides as follows:

Except as specifically provided in the letter dated December 8, 1994 (Exhibit 1), PROXIMITY and its publishers REQUIRE that when the LICENSEE utilizes promotional, advertising, or marketing materials involving one or more of the Proximity Databases, the following minimum recognition must be given: (Please refer to attached document entitled "Customer Marketing Information" (Exhibit 20) for complete details).

- A. On the copyright page of the product manual and on an appropriate screen of the product, the applicable text must be displayed as follows:

## THE PROXIMITY (publisher) DATABASE

©Copyright 199\_\_

(publisher's full name)

©Copyright 199\_\_ All Rights Reserved

Proximity Technology, Inc.

- B. On the copyright page of the manual above the copyright notice the following phrase must be used:

"The Spelling portion of this product is based on Proximity  
Linguistic Technology."

- C. On any document which references the word list (dictionary), the appropriate publisher's name as well as Proximity's name must be used as illustrated in the following example:

"Words are checked against the (# of words) word  
Proximity/(publisher) Database."

6. MCAFFEE Software, Inc. OEM Software License Agreement

Paragraph 7.1 incorporates by reference the Software Redistribution Guide attached to the license as Exhibit B.

Section I of the Copyright Guidelines provides that "any OEM of MCAFEE Associates, Inc., shall reproduce a copyright notice on a media containing authorized copies of MCAFEE products and on all documentation." The copyright guidelines contain other requirements, and a copy of it is attached at Tab 1. For example, section 5 provides as follows: "OEM shall mark, externally and in the same place that OEM affixes its own product identification and/or serial number, the words: "Software contained with the \_\_\_\_\_ (insert the "Defined Hardware" from the MCAFEE OEM License Agreement) is used under license from MCAFEE Associates, Inc."

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7. Avalan Technology System Integration Remarketer Agreement

Under paragraph 2.4, the use of Avalan's trademarks is governed by Schedule E, a copy of which is attached at Tab 2.

Paragraph 3.3 is entitled "Legending" and provides as follows:

As appropriate for the bundling of the Software within the System and the branding of the System, XcelleNet will reproduce and include in all copies of the Software and documentation prepared by XcelleNet the copyright notice(s) and proprietary legend(s) of Vendor as they appear in the Software and documentation supplied by Vendor. In order to comply with the foregoing, XcelleNet will include an intellectual property rights attribution statement in all documentation referring to the Software, on the product media, packaging and collaterals, splash screens and "help about" dialogue box as mutually agreed by the parties during the development of the enhancements for the Software pursuant to the Software Enhancement Addendum.

If you would like for me to discuss any of these matters with the personnel examining Timbuktu's source code, please let me know. If I need to call anyone, please give me their name and telephone number.

John P. Pinkerton  
(214) 969-5129  
5-5129

April 13, 1998

Attachments

cc: Albert K. Hoover

DI.MAIN01:266947\_J.WPD

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TAB 1

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**CONFIDENTIAL**  
**COPYRIGHT GUIDELINES**

**I OVERVIEW**

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**II GENERAL COPYRIGHT INFORMATION**

The symbol "c" is inserted in the notice after the word "Copyright" wherever possible and as "(C)" in machine-readable format.

The date included in the notice is the year in which the work was first published. If the work is a derivative work which contains some previously copyrighted material published in an earlier year (i.e., a revision or update), the notice must include both dates in chronological order. Licensee is responsible for ensuring that the appropriate dates are inserted in the appropriate Copyright Notice.

**SAMPLE REQUIRED MINIMUM COPYRIGHT NOTICE:**

"Copyright © McAfee Associates, Inc., VIRUSSCAN V1.5 1993, 1994. All Rights Reserved.

**III EXTERNAL NOTICE ON MAGNETIC MEDIA**

Licensee must place a label bearing the appropriate copyright notice and the following license requirements in printed form on the exterior of magnetic recording media. It is the Licensee's responsibility to determine which appropriate Copyright Notice to use. (Such appropriate copyright notice is hereinafter referred to as "Copyright Notice".)

**NOTICE OF LICENSE RESTRICTIONS**

All software on this diskette is copyrighted and may be used and copied only under the terms of the McAfee End User License Agreement (EULA). This diskette may be used only by the registered user, and may not be resold or transferred except in accordance with the terms and conditions of the EULA. Disassembly of code is prohibited. Unauthorized reproduction, transfer, or use this material may be a criminal offense (insert appropriate Copyright Notice).

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**V ROM BASED LICENSED PROGRAMS, IF APPLICABLE**

A. OEM shall mark, externally and in the same place that OEM affixes its own product identification and/or serial number, the words: "Software contained with the \_\_\_\_\_ (insert the "Defined Hardware" from the McAfee OEM License Agreement) is used under license from McAfee Associates, Inc.

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8. OEM shall mark upon the external surface of the ROM chip by silkscreen or other non-destructible material the appropriate Copyright Notice.

## VI DOCUMENTATION REPRINT RIGHTS

If OEM is granted Documentation Reprint Rights from MCAFEE Associates, Inc., OEM must include an appropriate Copyright Notice in MCAFEE documentation on the title page or the reverse thereof or on either side of the cover page of the product, related books, manuals, or pamphlets distributed.

## TRADEMARK GUIDELINES

## I FUNCTION OF TRADEMARKS

Trademarks, when properly used, serve the important function of identifying MCAFEE Associates, Inc. as the source of MCAFEE products. Trademarks help users and other members of the public recognize MCAFEE products and the high quality and dependability associated with these products.

## II GENERAL RULES

A. MCAFEE Associates, Inc. trademarks must be displayed in printed or logo form.

B. Authorization for licensee to use MCAFEE marks must be obtained in writing from MCAFEE Associates, Inc. OEM may not use MCAFEE marks to identify their business or to identify any products other than those from MCAFEE.

C. For each mark which is a registered MCAFEE trademark, the first occurrence of the mark in a publication or advertisement should include an indication that the mark is a MCAFEE registered trademark. In the United States, this indication is made by using a "®" symbol after the product name. For example, "VIRUSSCAN®". For use in footnotes the legend should read "(PRODUCT NAME) is a Registered Trademark of MCAFEE Associates, Inc." Outside of the United States, an "SM" is sometimes used instead of the "®" with the same footnote.

D. For each mark which is an unregistered MCAFEE mark, the first occurrence of the mark in a publication or advertisement shall include an indication that the mark is a MCAFEE trademark. In the United States, this indication is made by using the "(PRODUCT NAME)" reference symbol and the footnote, "(PRODUCT NAME) is a trademark of MCAFEE Associates, Inc."

E. Any firm marketing software products or otherwise referring in promotional materials and the like to MCAFEE trademarked products that originate from MCAFEE Associates, Inc., e.g. "VIRUSSCAN" or "NETSHIELD", must identify that the MCAFEE names for those products are trademarks.

Correct: "NETSHIELD" software.

F. MCAFEE trademark must never identify any product or service not originating from MCAFEE Associates, Inc.

G. The trademark identifies ("®" and "SM") together with a footnote should be in a readable style of type.

H. Trademarks must be used as proper adjectives. Trademarks should not be used as verbs, in plural form, or in possessive form.

Incorrect: MCAFEE compatible software.

Correct: Software compatible with MCAFEE products.

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III EXAMPLES OF USES OF MCAFEE TRADEMARKS

A. MCAFEE trademarks may never be used to describe a person and should be used to describe a MCAFEE product.

Incorrect:

"VIRUSSCAN users."

Correct:

"VIRUSSCAN software users."

B. MCAFEE trademarks may never be used to describe a product that does not come from MCAFEE Associates, Inc. unless, and to the extent that permission is granted in writing, by MCAFEE Associates, Inc. or a MCAFEE subsidiary.

IV TRADEMARKS REGISTERED IN THE UNITED STATES

MCAFEE Associates, Inc., the MCAFEE logo, VirusScan, NetShield, NetTools and SiteMeter are registered trademarks of MCAFEE Associates, Inc.

These marks must be followed by the "™" symbol. For publication outside the United States, local trademark laws must be followed.

V OTHER TRADEMARKS OR TRADENAMES

The following marks shall be treated as unregistered trademarks in accordance with Paragraph II.E above:

BRIGHTWORKS(TM)	SITEMETER
NETTOOLS	LAINVENTORY(TM)
VIRUSSCAN	NETREMOTE(TM)
NETSHIELD	BRIGHTWORKS UTILITIES(TM)
MCAFEE SERVICE DESK	WEBSCAN(TM)
SITEXPRESS(TM)	ROUNSHIELD(TM)
BOOTSHIELD(TM)	SERVERSTOR(TM)
WEBSTOR(TM)	PCCRYPTO(TM)
VYCORPES(TM)	VYCOREENTERPRISE(TM)
DF UMBRELLA	REMOTE DESKTOP 32(TM)
GROUPSHIELD(TM)	SABERTOOLS(TM)
GROUPSCAN(TM)	SABER LAN WORKSTATION(TM)
WEBCRYPTO(TM)	PCFIREWALL(TM)
NETCRYPTO(TM)	NTSENTIAL(TM)

VI SABER NAMES

Certain MCAFEE products use the trademark "SABER" (the "Mark"). Products currently bearing the Mark are SABERTOOLS and SABER LAN WORKSTATION. The Mark is a trademark of American Airlines, Inc. ("American") and is licensed for use to MCAFEE, which is not otherwise affiliated with American or SABRE Travel Information Network. OEM acknowledges and agrees that: (a) the Mark is owned by American; (b) it will make no claim to the Mark superior to the claims of American and MCAFEE in the applicable computer software, hardware and

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peripherals industry; (c) it will not take any action to deceive or confuse the public regarding the Mark; (d) it will provide MCAFEE at least annually with representative materials showing the use of the Mark in the preceding twelve (12) month period; and (e) it will use best efforts in all of "SABER" marked products advertisements greater than one-quarter page where the proprietary legend of MCAFEE is used to include the following notice with the same prominence that such proprietary legends of MCAFEE are given:

"SABER is a trademark of American Airlines, Inc. and is licensed for use to MCAFEE Associates, Inc. MCAFEE Associates, Inc. is not affiliated with American Airlines, Inc. or SABRE Travel Information Network."

SUMMARY

No representation shall be made that MCAFEE has reviewed or authorized any publication or product, or endorses any publication, product or contents thereof, without express prior written permission from MCAFEE.

We hope these guidelines give you a clear understanding of the policies of MCAFEE regarding advertising and outside publications. Please contact MCAFEE at (214) 706-2547 if you have further questions regarding these policies.



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TAB 2

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## SYSTEM INTEGRATION REMARKETER AGREEMENT

SCHEDULE E  
VENDOR TRADEMARKS

**OWNERSHIP.** All trademarks, service marks, trade names, logos or other words or symbols identifying the Software or Avalan's business (the "Marks") are and will remain the exclusive property of Avalan or its licensors, whether or not specifically recognized or perfected under applicable laws. XcelleNet will not acquire any right in the Marks, except the limited use rights specified in "Use" below. XcelleNet will not register, directly or indirectly, any trademark, service mark, trade name, company name or other proprietary or commercial right that is identical or confusingly similar to the Marks or that constitute translations thereof into the language(s) spoken within the territory where XcelleNet distributes the Software. Upon Avalan's request, XcelleNet will execute, at Avalan's expense, the instruments that may be appropriate to register, maintain or renew the registration of the Marks in Avalan's or its licensor's name within the territory where XcelleNet distributes the Software.

**USE.** XcelleNet will use the Marks exclusively to advertise and promote the Software and the bundled products. All advertisements and promotional materials will (i) clearly identify Avalan or its licensors as the owner of the Marks, (ii) conform to Avalan's then-current reasonable trademark and logo guidelines, and (iii) otherwise comply with any local notice or marking requirement contemplated under any applicable laws. Upon Avalan's request, XcelleNet will deliver a sample of the advertisement or promotional materials to Avalan for approval. If Avalan notifies XcelleNet that the use of the mark is inappropriate, XcelleNet will not further publish or otherwise disseminate the advertisement or promotional materials until they have been modified to Avalan's satisfaction.

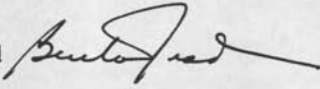
**INFRINGEMENT.** XcelleNet will immediately notify Avalan if XcelleNet learns (i) of any potential infringement of the Marks by a third party or (ii) that the use of the Marks may infringe the proprietary rights of a third party. Avalan will determine the steps to be taken under these circumstances. XcelleNet will (i) provide Avalan, at Avalan's expense, with the assistance that Avalan may reasonably request and (ii) take no steps on its own without Avalan's prior approval.

TAB 2

BURTON GRAD ASSOCIATES, INC.  
101 POST ROAD EAST  
WESTPORT, CONNECTICUT 06880  
(203) 222-8718 FAX: (203) 222-8728  
E-MAIL: BURTGRAD@AOL.COM

*Attorney/Client  
Privilege*

*88.*

**Date:** May 4, 1998  
**To:** Al Hoover  
**From:** Burton Grad   
**Subject:** Timbuktu Due Diligence

Since SCI and Timbuktu have jointly announced their intentions regarding a merger, what effect does this have on BGAI's responsibility to maintain non-disclosure under the existing NDA agreements?

It is my understanding that the proposed acquisition still would not come to pass if either of the two boards did not approve the proposed terms and conditions. This being so, how can SCI get the in-depth information it needs to plan how to integrate the companies without getting a waiver on access to certain technical information.

SCI has carefully used BGAI to examine confidential technical information so as to avoid "contaminating" any SCI employees. Therefore, if the deal is not closed, SCI can rightfully say that none of its employees have any knowledge from the due diligence which would preclude SCI from producing its own products or from acquiring products (or services) from another software/services vendor.

With the recent smaller SCI transactions, this process seems to have worked satisfactorily. However, given the size and significance of the Timbuktu acquisition, we should clarify the rules under which BGAI operates, from a due diligence standpoint, between the public announcement and the actual formal closing:

1. If an authorized SCI employee asks BGAI either for more detailed information from the BGAI due diligence or for documents which BGAI received from the seller, should BGAI release this information or documents, even if it obtains written approval to do so from the seller?

2. If the answer to Question 1 is yes, what form of release should BGAI get from the seller? See Enclosure 1 as a sample letter I might write.
3. If SCI receives such information or documents, either from BGAI or the seller, how does SCI protect itself from "contamination" or from future claims by the seller if the deal does not close (for any reason, by either side)?

I have such a current information request from Jim Hoyt. I have asked Shereef Nawar if he had any objection to release of specific documents. He said that there was no objection and that he would sign a release. However, he did say he would prefer to provide these directly. I have informed Hoyt of this, but asked him to talk to you before asking Nawar.

A timely response on this issue is important. We will not release nor formally ask for permission to release without your specific instructions. My primary concern is with potential SCI contamination.

There is a second matter which I believe needs clarification in the particular Timbuktu situation. SCI had invested considerable time and effort in learning all it could regarding Timbuktu before sending its original letter of intent. However, the process following the acceptance of SCI's proposal by Timbuktu was not the usual two to four-week due diligence, but rather a truncated (but intense) one-week process covering customer satisfaction, customer service, legal review, financial review and technical examination.

Let's assume that the deal proceeds and closes, could any SCI stockholder use the shorter due diligence as the basis for a claim that insufficient due diligence was performed and that the price paid was excessive? Would this be totally mitigated by the extensive planning process which SCI and Timbuktu will now go through prior to closing? Would this same reasoning apply if subsequent business results (regardless of cause) would make it appear a year later that the price paid was not in line with the value received?

Obviously, if the answers to the above questions identify any significant risk, then SCI should carry out a longer, more typical due diligence process. I do not believe this would be needed so much for any decision-making purpose, but rather for cosmetic reasons.

I look forward to your calling me with your responses.

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E-MAIL: BURTGRAD@AOL.COM

NOT SENT

**Date:** May 4, 1998  
**To:** Shereef Nawar  
**Copy:** Albert Hoover  
**From:** Burton Grad  
**Subject:** Technical Due Diligence Documents

In response to a request from a senior executive at Sterling Commerce, Inc. (SCI), Burton Grad Associates, Inc. (BGAI) requests your review of the documents listed in Attachment A. We ask you to determine whether you are willing to waive your rights under the non-disclosure agreement signed by SCI and agreed to by BGAI to permit release of any or all of these documents to SCI, subject to their use in the ongoing planning work with your company.

Please respond to BGAI with a copy to Mr. Albert Hoover at SCI indicating whether you authorize BGAI to release a copy of each listed document or whether you decline such permission.

Thank you for all your cooperation during the due diligence process with the assigned BGAI Associates.

Attachment

**List of Documents Received by  
Martin Silberberg from Shereef Nawar**

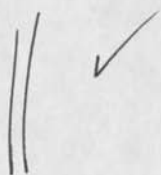
1. List of people under Rodney and Bryan Jackson
2. List of people under Barry Cole - Director Product Testing
3. 1997 Quarterly Performance Review of Shereef Nawar
4. RemoteWare for Windows NT Version 3.3 - Product Requirements Document
5. RemoteWare Enterprise Registry Events Overview
6. RemoteWare 3.3 Program Document
7. Test Journal for WorkObject Editor
8. Test Journal Software Manager
9. XcelleNet's Future Direction
10. Problem Resolution
11. Engaged Problems Status Report

Subj: Technical Due Diligence  
Date: 98-04-23 09:35:10 EDT  
From: Bob\_Barker@stercomm.com  
To: burtgrad@aol.com  
CC: Clark\_Woodford@stercomm.com

Burt,

I've read your complete report on XcelleNet-- nice job.

Overall, it looks as though we're in reasonably good shape, just as you reported in your initial summary. The two items that concern me the most are the possibility that unlicensed code was introduced by coop students and the lack of beta testing or even a "controlled release" program. Of course, the good news is that both of these are correctable.



Regards,  
Bob

----- Headers -----

Return-Path: <Bob\_Barker@csg.stercomm.com>  
Received: from rly-zb01.mx.aol.com (rly-zb01.mail.aol.com [172.31.41.1]) by air-zb04.mail.aol.com (vx) with SMTP; Thu, 23 Apr 1998 09:35:10 -0400  
Received: from ns.csg.stercomm.com ([204.214.3.7])  
by rly-zb01.mx.aol.com (8.8.5/8.8.5/AOL-4.0.0)  
with ESMTP id JAA23127 for <burtgrad@aol.com>;  
Thu, 23 Apr 1998 09:35:11 -0400 (EDT)  
Received: from DAL-MTA01.csg.stercomm.com (dal-mta01.csg.stercomm.com [199.1.5.246])  
by ns.csg.stercomm.com (8.8.5/8.8.5) with SMTP id IAA17658;  
Thu, 23 Apr 1998 08:34:10 -0500 (CDT)  
Received: by DAL-MTA01.csg.stercomm.com (Lotus SMTP MTA SMTP v4.6 (462.2 9-3-1997)) id 862565EF.004A8B0C ; Thu,  
23 Apr 1998 08:34:12 -0500  
X-Lotus-FromDomain: STERCOMM  
From: Bob\_Barker@stercomm.com  
To: burtgrad@aol.com  
cc: Clark\_Woodford@stercomm.com  
Message-ID: <862565EF.0049D603.00@DAL-MTA01.csg.stercomm.com>  
Date: Thu, 23 Apr 1998 08:32:04 -0500  
Subject: Technical Due Diligence

BURTON GRAD ASSOCIATES, INC. BG

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BURGRAD@AOL.COM

Sterling Commerce, Inc.  
4600 Lakehurst Court  
Dublin, OH 43017-0760

Invoice #2876

April 20, 1998

Attention: Al Hoover  
cc: Jim Hoyt

Project #: 263-9

**INVOICE**

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**Project: Perform Technical Due Diligence Study of  
Timbuktu Products and Assets**

**Consulting Services:** April 9 - 17, 1998

Burton Grad	3	days @ \$2,500/day	\$7,500.00
Marty Silberberg	2.125	days @ \$1,200/day	2,550.00
Gary McSwain	1.5	days @ \$1,500/day	<u>2,250.00</u>

**TOTAL FEES** \$12,300.00

**Expenses Incurred:**

April 13-14:

Marty Silberberg: New York City to Atlanta, Georgia and return

Airfare	\$292.00	
Hotel	136.80	
Meals	55.60	
Local Transportation	<u>151.50</u>	<u>635.90</u>

Note: Additional expenses for telephone, fax and express delivery will be sent when charges have been received.

**TOTAL INVOICE** \$12,935.90

*Please Pay This Invoice Within 15 Days of Receipt*



## Silkeborg + McSwain

- Do not have programming ~~the~~ standards
- No consistency ~~on~~ between primary products.
- All C code is excellent and highly quality
- C++ code ~~is quite junior~~ appears to be quite junior in terms of: documentation (little to none), style, comments, format is not (headers, function prototype, braces), but function and memory calls were appropriate
- RemoteWare; <sup>C</sup>Software Mgr, <sup>C++</sup>Inventory Mgr, <sup>C++</sup>Remote Program

all OS/2 code is in C  
NT code for RemoteWare <sup>was</sup> ported and enhanced

## Source Code Review -

DOS - C

UNIX/SCO - RemoteWare - C

OS/2 -

Help Files - RTF files

HPJ Compiler mappings in place

Install Shield - RUL files

Java - Symantec Visual Cafe Pro

all header files

revised IDL - std files / not tweaked

ODL - no custom changes

DEF - std

C Dialog - (C++) Microsoft based classes (no documentation).

C++ code need to be fixed  
to have fully documented  
system.

Similar to other programs -  
functionally

Maintenance records -

2/15 227 Open issues Help Desk Backlog  
(some relate to props not  
supported), 30 fixed with patches,  
87 to future releases, 4 in Engng

4/15 8 open bugs in development

---

Coop -

~~from~~ Who wrote the code? have it  
documented + reviewed

run through  
boards checker - performance ckg,  
\* reliability, memory leakage

install coding stds for all new  
work.

Embedded code -

Microsoft System Journal  
provider identified -  
no use restriction

XFS - 3<sup>rd</sup> party in design stage (what  
product?)

Coop Students

- no devel phases ~~at~~ - in use
- user team approach  
4-8 people
- start with Prog Req. Doc
- Testing integrated with Devel
- use products internally
- ltd customer testing (Beta testing)

### Nilkenberg --

- significant dependency on a few key people
- ~~No good staff~~ may be long lead times in solving customer problems
- At executive leader - may not be aware of detailed problems

**Specific Review Subjects****A. Development**

1. Organization and training of development people
2. Development methodology
3. Scheduled enhancements/customer commitments
4. Current maintenance activities
5. Current development projects
6. Testing and quality assurance procedures
7. Effort and cost records for development
8. Product release and update procedures
9. Installation procedures
10. Availability and procedures for international usability and service

**B. Technical Review**

1. Supported platforms and systems for each product
2. Major features of the products -
  - functions performed
  - ease of installation and use
  - maintainability
  - audits and controls
  - security
- (P) 3. Development languages and special tools used
- (P) 4. Number of programs per product and lines of code
- (P) 5. Provenance of all program modules (where did code come from)
- (P) 6. Inclusion of proprietary notices in source and object modules, both current and previous releases
- (P) 7. Method of change control
8. Volume and magnitude of change history
9. Number of product releases being supported
- (P) 10. Structure of the code
- (P) 11. Internal system documentation level and updates
12. Documentation of specifications and design
- (P) 13. Prerequisites for running the products
- (P) 14. Access to source code
- (P) 15. Access to usage/demo of operational code
- (P) 16. Unit and system test cases

Note: (P) means that this is primarily a program review function while the others are management review

per Kathy Heiberg -

1. Can NT be portforward (ala MS)  
or might it be in the future?  
same question for OS/2.  
Does case of Adware key with OS/2  
make ~~make~~ any difference?

2. Are <sup>© + trademarks etc</sup> notices on Timbuktu code.

for both T code + 3rd party code

3. Y2K?

Garry McS  
770 967  
8260

Ritz-Carlton Hotel 2401 East Camelback Rd  
4 602-468-0700

Phoenix, AZ 85016

1 copy to Al Hoover

— Dublin

1 copy to Bob Barker

cc: Steve Shiflet  
Clark  
Barker —  
Hoyt

Woodford  
Hoyt  
Shiflet ] Ritz-Carlton

Hoyt Fax 614-293  
1320

Fax to Barker  
(CSG Dallas)

Barker —  
CSG Dallas

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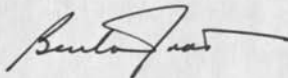
**Date:** April 20, 1998

**Number of Pages including cover:** 32

**To:** Jim Hoyt

**Copy:** Al Hoover

**From:** Burton Grad



**Subject:** Timbuktu Due Diligence

Enclosed is the initial due diligence report on Timbuktu. We are express delivering the entire report (including all appendices) to Al Hoover, Bob Barker, Steve Shiflet, Clark Woodford and you for April 21 delivery. The faxed copy includes the text of the report plus just the following appendices:

Appendix B	1 page
Appendix C	6 pages
Appendix D	11 pages
Appendix E-2	1 page
Appendix F	1 page

Please call me to discuss whether you wish any further due diligence work on Timbuktu.

Separately, we need to plan on initiating the Valuation work for asset allocation of the acquisition cost of Timbuktu.

Jim, please give Al Hoover a copy of this report. I have also faxed a copy to Bob Barker in Dallas.

---

# MYS MANAGEMENT SERVICES

---

Date: April 16, 1998

To: Burton Grad  
Burton Grad Associates, Inc.

From: Martin Y. Silberberg

Subject: Timbuktu Development Due Diligence

Reference: My memo to you of April 15, 1998

This memo includes and adds detail to the information, conclusions and recommendations in the referenced memo. It follows the outline of the Development due diligence check list used in the discussions with Shereef Nawar and Rodney Trugman.

## 1. Organization and training of development people

Enclosures 1 and 2 show the organization of the developers and testers, with a total of 42 developers (44 headcount) and 37 testers (38 headcount) plus 13 coops from Georgia Tech. The three managers (Barry Cole, Rodney Trugman and Bryan Jackson) report to Shereef, along with a technical adviser who carries out research activities for Development.

Most of the regular staff have been with the company for over two years. Shereef goes back to the beginning and Rodney has been with them for ten years. They said there was very little staff turnover and significant personal loyalty and identification.

There is no formal training for new hires except for their attendance at a customer (user) class that deals with function and usage. People are hired based on their resumes, references and personal contacts. Recruiters are used to interview for skill and personality match.

Skilled/experienced hires are assigned to project teams and less experienced hires start in the maintenance areas. Project teams are kept small, as the organization charts show, which allows for rapid integration of new people. Shereef said it was typically two weeks to productivity for skilled hires. Everyone participates in ongoing education; e.g. in Microsoft classes, as appropriate. These classes are held both on and off site.

There are no formal position descriptions but there are quarterly, documented performance reviews which deal with accomplishments over the prior quarter and goals for the

TMBKT2-1



coming quarter. Everyone in Development, including Shereef, participates in this process. Enclosure 3 shows Shereef's performance review for the fourth quarter of 1997. The person being reviewed does a self-evaluation first, which he sends to his manager. The manager then adds his comments and the package is sent to the next level manager for review. After review, the package is returned to the manager for discussion with the employee. This process has been in place for two or three years, is applied diligently and has proven to be effective.

You might notice that Shereef's review is a bit heavy on style, as opposed to measurable achievement. He said that the latter criteria get more emphasis with Development staff.

Promotion and salary increases are based on these reviews; i.e. on contribution.

## 2. Development methodology

All development, be it a new product or an enhancement, must start with a statement of requirements from Marketing; i.e. from a product manager. Shereef stated that he will do no work without a Product Requirements Document (PRD). Enclosure 4 is the PRD for RemoteWare for Windows NT, Version 3.3. Note that it has undergone revisions and updates as described on page 6. Development is involved in this definition and documentation. All parties must sign off.

Based on the PRD, Development then prepares a Design Document which describes the product or enhancement in some detail from a developer viewpoint. Enclosure 5 is a Design Document for the RemoteWare Enterprise Registry.

Based on the PRD and Design Document, the product manager and developers jointly prepare a Program Document which identifies the program content, team members and schedule, with key checkpoints. It defines all the steps that must be taken to get the product or enhancement out the door. The Program Manager, author of the document, is a product manager. Shereef said that there are weekly meetings to check schedules and content against this plan. Enclosure 6 shows the Program Document for RemoteWare 3.3. These documents are, of course, available in both hard copy and online.

All of this is quite good and the documents appear to follow some reasonably consistent format. However, no formal software design, programming, documentation or testing tools, standards or methodologies were identified. Much is left to the discretion and choice of team leaders. The result is inconsistency in quality and excessive long-term support dependency on the knowledge residing with individual developers.

A set of consistent tools, standards and methodologies should be defined, all developers and testers should be trained in their use and the disciplines should be ensured by Development management through monitoring and the existing developer/tester performance evaluation process.

As noted above, development teams are deliberately kept small, typically 4 to 6 people, 8 people maximum. This avoids the communication difficulties often encountered in large programming and testing teams. Shereef feels that there is good focus on tight communication and code integrity.

With regard to the testing process, Timbuktu has evolved to a hybrid organization in which testers are part of the development team but report to and are evaluated by a separate manager. The objective is to avoid the excessive "cooperation" that often occurs when both developers and testers are part of the same team, with the shared objective of getting the product out the door, and the sometimes excessive "contention" that results when they are not. Shereef feels that their system works quite well.

Testing is responsible for quality and adherence to the PRD. They are involved in reviewing the design, testing code and preparing a test plan. They perform an alpha test upon code completion consistent with a Test Journal prepared by one of the testers. Enclosures 7 and 8 are examples of Test Journals for the WorkObject Editor and Software Manager.

These are two very different documents in terms of depth and detail, which undoubtedly is related to the comparative complexity of the code being tested. However, it is my understanding that there are no formal standards for designing and documenting tests. As noted above there should be.

Note that beta tests are sometimes conducted at customer sites but not consistently. Given the diversity and complexity of the environments in which Timbuktu's products are used by customers, it is not possible to fully test new product and function in house. Yet there is no formal beta (customer) test as part of the development process. Beta test requirements should be identified and the appropriate sites (customers) should be selected and enlisted. Exceptions to the general rule should require approval at the VP or CTO level.

### 3. Scheduled enhancements/customer commitments

Enhancements are treated as outlined above with regard to requirements definition and the development/testing process.

Timbuktu rarely does a special enhancement for a specific customer, but will accelerate the availability of a particular enhancement to address a specific customer need. Note that no custom code is produced in development; that is done by the Integration Services staff (a group of about 12 people) in Customer Operations. They provide consulting and special support.

According to Shereef there are many enhancements in the pipeline now, many scheduled for preliminary release in June. The enhancements will add platforms, address performance, usage environment and scale requirements and add some functions. These are substantial enhancements. There are no new products in the pipeline.

After the initial release of an enhancement (or product), Development obtains and responds to customer comments and experience. There is, in fact, some ongoing contact between Development and customers via the customer briefing sessions that Marketing conducts. Depending on the content, Shereef and/or one of his managers will attend. According to Shereef there are one or two customer briefings each week. The agenda is defined by the customer. Enclosure 9 is the agenda for a briefing for AMP that was being held at Timbuktu headquarters on April 14. Note agenda items 2, 5 and 9 which relate to enhancements. (Also note agenda items 6, 7, 8 and 13 which relate to maintenance and quality and will be referenced below.)

#### 4. Current maintenance activities

Development is undergoing some significant changes at this time which are part of a maturing process that addresses the implications of the scope, complexity and broad customer base of Timbuktu's products. There is a particular focus on maintenance responsibility.

It appears that the focus prior to the beginning of this year was on being first to market with product and function. That is certainly understandable. Now other, quality related matters are receiving increased attention. That is the right direction and should be continued.

The key organization change is that third-level maintenance (repair) responsibility is currently being returned to Development. Prior to this year it was being done by a separate group in order to allow developers to focus on new product and function. The result was an increasing lack of the detailed knowledge needed to address issues that got through the first and second levels of customer support.

Now the developers who wrote the code and the testers who tested it will be involved in resolving problems. In its planning, Development will now allocate 15% of its resources, as a buffer, to maintenance activities

As a possible indicator of the importance of this change, note again items 6, 7, 8 and 13 on the AMP briefing agenda. CSG should review recent customer satisfaction surveys to see if these concerns are widespread.

In any case, this reorganization of the support function should be completed to ensure efficiency, responsiveness and customer satisfaction. Effectiveness in this context should be addressed in developer/tester performance requirements and accomplishments, with emphasis on first-level (team leader) responsibility. This should improve quality in the development and testing phases as well as in the maintenance operations.

There also appears to be need for enhanced (formalized) communication between Development and Customer Support on maintenance issues. Possibly because of the prior organization, there appeared to be a lack of information in Development about the number, type and significance of customer reported programming bugs, documentation errors or usage problems being handled at the first and second support levels. Enclosure 10, however, does show the list of problems currently in the backlog and how they are currently being handled. Of the 227, 102 are, in effect, being deferred. The rest are being handled as noted.

Enclosure 11 provides detail on the eight problems that have gotten through the first two support levels and are now being handled by Development. It is a short list and the most recent addition was made on April 6, 1998. If the first and second level support teams are not holding onto problems, this is good news.

#### 5. Current development projects

Please see section 3 above.

#### 6. Testing and quality assurance procedures

Please see sections 2 and 4 above.

#### 7. Effort and cost records for development

There is no formal time-sheet tracking of development activities. Apparently costs are estimated based on the actual schedules and number of developers/testers involved, by phase.

#### 8. Product release and update procedures

Please see sections 2, 3 and 4 above. When a release or update has been completed and tested, the information is put on Timbuktu's web page. Apparently customers can opt for an early release or may wait for the formal release.

#### 9. Installation procedures

According to Shereef, many customers, over 50%, can install the products by themselves with the information/guidance provided. However there is increased attention on improving installation procedures and on helping OEM's include Timbuktu products in their offerings. Note the group shown on the organization chart as being dedicated to installation.

#### 10. Availability and procedures for international usability and service

Timbuktu has offices in the UK and, a new one, in Germany. International sales provide 15 to 20% of their revenue. Most of the products, nevertheless, are in U.S. english. Some, but not all, have client-oriented components in UK english, German and French as well. There are plans to expand internationally and there is double-byte capability.

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## MYS MANAGEMENT SERVICES

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Date: April 15, 1998

To: Burton Grad  
Burton Grad Associates, Inc.

From: Martin Y. Silberberg

Subject: Timbuktu Development Due Diligence

The conclusions and recommendations in this report are based on a time-limited study of Timbuktu's Development status, methodology and procedures.

An extended telephone conversation addressing key questions was held with Shereef Nawar, Timbuktu's Chief Technical Officer on Monday, April 13, 1998. Face-to-face meetings were held with Mr. Shereef and his VP of Development, Rodney Trugman, at Timbuktu headquarters in Atlanta on Tuesday, April 14, 1995.

Much of the discussion on the 14th was directed at a Technical Review on which Gary McSwain, another BGAI Associate, has reported. The meeting provided the opportunity to receive and review samples of Development documents now being used or being considered for use. It was important to have these documents available; they will be sent to BGAI under separate cover.

### Conclusions

Development is undergoing some significant changes at this time which are part of a maturing process that addresses the implications of the scope, complexity and broad customer base of Timbuktu's products.

It appears that the focus prior to the beginning of this year was on being first to market with product and function. That is certainly understandable. Now other, quality related matters are receiving increased attention. That is the right direction and should be continued.

Mr. Shereef and Mr. Trugman impress me as being very competent leaders who know what should be done and are taking appropriate action. Much has been accomplished, but I do have several concerns and recommendations related to Development at this point. None would be reasons for CSG not to proceed with acquisition, but the need for continued focus, effort and resources should be recognized.

TMBKT1-1

### Concerns and Recommendations

a. No formal design, programming, documentation or testing tools, standards or methodologies were identified. Much is left to the discretion and choice of team leaders. The result is inconsistency in quality and excessive long-term support dependency on the knowledge residing with individual developers. A set of consistent tools, standards and methodologies should be defined, all developers and testers should be trained in their use and the disciplines should be ensured by Development management through monitoring and the existing developer/tester performance evaluation process.

b. Given the diversity and complexity of the environments in which Timbaktu's products are used by customers, it is not possible to fully test new product and function in house. Yet there is no formal beta (customer) test as part of the development process. Beta test requirements should be identified and the appropriate sites (customers) should be selected and enlisted. Exceptions to the general rule should require approval at the VP or CTO level.

c. Third-level maintenance (repair) responsibility is currently being returned to Development. Prior to this year it was being done by a separate group in order to allow developers to focus on new product and function. The result was an increasing lack of the detailed knowledge needed to address issues that got through the first and second levels of customer support. Obviously, this reorganization of the support function should be completed to ensure efficiency, responsiveness and customer satisfaction. Effectiveness in this context should be addressed in developer/tester performance requirements and accomplishments, with emphasis on first-level (team leader) responsibility. This should improve quality in the development and testing phases as well as in the maintenance operations.

d. Possibly because of the prior organization, there appeared to be a lack of information in Development about the number, type and significance of customer reported programming bugs documentation errors or usage problems. The reorganization noted above should help significantly, but there appears also to be need for enhanced (formalized) communication between Development and Customer Support on these matters.

Third Party Software Used in RemoteWare

Best Grad

203-222-8728

Source Company	Source Product	Where Used	Used For
InstallShield	InstallShield 3	All 3.x products	Installation
Hummingbird	Common Ground	Subscriber for 3.x	Common View Format
LeadTools	LeadTools	Workshop 3.x	Render Graphic Images
Tivoli	Tivoli Plus	Tivoli Plus Module	Tivoli Plus
Optec	Optec-Sort	Exchange Directory Synchronization	Sorting
Summit	Basic Script	3.x Basic Client, DXA	Scripting
Intersolve/Q+E	QELIB	FORMS 2.5	Database access
Linguistic System Licensing	Proximity	Mail 2.5 Client	Spell Checking
RETIX	RETIX GATEWAY	X.400 Gateway for Mail 2.5	X.400 gateway
Intersolve/Visigenic	Visodbc Driver Set	DXA	Database access
Network Associates/McAfee	AniVirus	AV Manager	Virus Scanning
Network Associates/McAfee	Equip	Inventory Manager	Inventory Scanning
CoreData	Backup	Backup Manager	Client Backup/Restore
Avalan	Remotely Possible	RemoteWare 3.x	Windows Remote Control

Wise

Wise

Software Manager

Builds installation/packages

AUGUST '98

FAX TEL  
 Bob Banker  
 404-881-7777  
 From:  
 Rust Grad  
 4/14/98



Beut Grad - 203-222-8728

RemoteWare For OS/2	Number of Orders	Quantity Purchased	Sunset Candidate
1 RW Server For OS/2	1334	1718	Low
2 RW Cluster For OS/2	269	279	Low
3 RW Workstation Option	284	332	Low
4 RW Portable Option	169	644	Low
5 RW Basic Client - Dos/Win/ OS/2	924	330653	Low
6 RW Basic Client - 4680/4690	22	4283	High
7 RW Basic Client - Routing	18	118	Medium
8 RW Basic Client - Macintosh	29	1000	High
9 RW Basic Client - UNIX	97	14112	Low
10 RemoteWare Basic Client - LAN	139	17674	Low
11 RemoteWare Basic Client - VMS	20	8950	Medium
12 RemoteWare Mail Administrator	340	334	Low
13 RemoteWare Mail Client	340	162998	Low
14 RemoteWare Mail Client - UNIX	2	10	High
15 RemoteWare X.400 Gateway For OS/2	37	37	Low
16 RemoteWare Mail Fax Support Option For OS/2	14	14	High
17 RemoteWare Desktop Administrator	158	158	Low
18 RemoteWare Desktop Node	257	86187	Low
19 RemoteWare Forms Editor	52	52	Low
20 RemoteWare Forms Node	394	141767	Low
21 RemoteWare Subscriber Administrator	94	94	Low
22 RemoteWare Subscriber Node	184	64181	Low
23 RemoteWare Documents Editor	29	29	Gone
24 RemoteWare Documents Node	110	20664	Gone
25 RemoteWare Application Node	79	12699	Low
26 RemoteWare Application Server	86	92	Low
27 RemoteWare Application Tool Kit	76	98	Low
28 RemoteWare Extended Client For OS/2	322	119468	Low
29 RemoteWare Extended Client For OS/2 Additional Users	30	26458	Low
30 RemoteWare Developer's Kit For OS/2	466	541	Low
31 RemoteWare Mail Transport Option	32	32	Gone 4/1/98
<b>RemoteWare For NT</b>			
32 RemoteWare Server for Windows NT	755	1025	Low
33 RemoteWare Cluster For Windows NT	145	147	Low
34 RemoteWare Basic Client For Windows NT (Windows, DOS)	710	305507	Low
35 RemoteWare Basic Client - OS/2	0	0	Low
36 Microsoft Exchange Gateway Option	73	73	Low
37 RemoteWare Extended Client Add-on Pack	320	128739	Low
RemoteWare Workshop			
RemoteWare WEB Offlien			
38 RemoteWare Subscriber Client	0	0	Low
39 RemoteWare Managed Client	36	15748	Low
40 RemoteWare Anti Virus Manager Client	21	9535	Low
41 RemoteWare Software Manager Client	29	18045	Low
42 RemoteWare Backup Manager Client	23	8912	Low
43 RemoteWare Inventory Manager Client	7	6420	Low
44 RemoteWare Developer's Kit For Windows NT	148	169	Low
45 RemoteWare Agent for Microsoft Mail Transport	6	6	Gone 4/1/98
46 RemoteWare Replication Agent for Lotus Notes	87	44162	Medium
47 RemoteWare Essentials For Lotus Notes	3	3	High
48 RemoteWare Data Exchange Agent	56	29750	Gone
49 Client Multi-Language Support	1	450	Low
50 Microsoft SQL Server	12	13	High
51 RemoteWare Plus for Tivoli	0	0	Low
52 NT - Site License	1	1	Low
<b>RemoteWare Express</b>			
53 RemoteWare Express Session Manager Server	7	7	Low
54 RemoteWare Express Software Manager Server	3	3	Low

" " Document Manager  
 " " Channel Manager  
 " " Mail Manager  
 " " News Manager

ESG project - Timbuktu

Jalen Blaine

614-793-5957

4

Atlanta  
public co.

60M rev

calendar year

130 people

long time discussions

accepted offer

no Ltr of Intent

announce 4/10 close 4/17

Al Hoover + ~~Steve~~

Bob Banher - ~~Pris Davel~~

mark

Alexander

Remote Computing

Tue/Wed - Monty Silberman

(Fax) Jim Hoyt  
614-793  
7320

## Timbuktu Development Due Diligence

The conclusions and recommendations in this report are based on a time-limited study of Timbuktu's development status, methodology and procedures.

An extended telephone conversation addressing key questions was held with Shereef Nawar, Timbuktu's Chief Technical Officer on Monday, April 13, 1998. Face-to-face meetings were held with Mr. Shereef and his Vice President of Development, Rodney Trugman, at Timbuktu headquarters in Atlanta on Tuesday, April 14, 1998.

Much of the discussion on the 14th <sup>delete</sup> was directed at a Technical Review on which Gary McSwain, another BGAI Associate, has reported. The meeting provided the opportunity to receive and review samples of Development documents now being used or being considered for use. It was important to have these documents available; they will be sent to BGAI under separate cover.

### Conclusions

Development is undergoing some significant changes at this time which are part of a maturing process that addresses the implications of the scope, complexity and broad customer base of Timbuktu's products.

It appears that the focus prior to the beginning of this year was on being first to market with product and function. That is certainly understandable. Now other, quality related matters are receiving increased attention. That is the right direction and should be continued.

Mr. Shereef and Mr. Trugman impress me as being very competent leaders who know what should be done and are taking appropriate action. Much has been accomplished, but I do have several concerns and recommendations related to Development at this point. None would be reasons for CSG not to proceed with acquisition, but the need for continued focus, effort and resources should be recognized.

### Concerns and Recommendations

- A. No formal design, programming, documentation or testing tools, standards or methodologies were identified. Much is left to the discretion and choice of team leaders. The result is inconsistency in quality and excessive long-term support dependency on the knowledge residing with individual developers. A set of consistent tools, standards and methodologies should be defined, all developers and testers should be trained in their use and the disciplines should be ensured by Development management through monitoring and the existing developer/tester performance evaluation process.
- B. Given the diversity and complexity of the environments in which Timbuktu's products are used by customers, it is not possible to fully test new product and function in-house. Yet, there is no formal beta (customer) test as part of the development process. Beta test requirements should be identified and the appropriate sites (customers) should be selected and enlisted. Exceptions to the general rule should require approval at the VP or CTO level.

- C. Third-level maintenance (repair) responsibility is currently being returned to Development. Prior to this year, it was being done by a separate group in order to allow developers to focus on new product and function. The result was an increasing lack of the detailed knowledge needed to address issues that got through the first and second levels of customer support. Obviously, this reorganization of the support function should be completed to ensure efficiency, responsiveness and customer satisfaction. Effectiveness in this context should be addressed in developer/tester performance requirements and accomplishments, with emphasis on first-level (team leader) responsibility. This should improve quality in the development and testing phases as well as in the maintenance operations.
- D. Possibly because of the prior organization, there appeared to be a lack of information in development about the number, type and significance of customer reported programming bugs, documentation errors or usage problems. The reorganization noted above should help significantly, but there appears also to be need for enhanced (formalized) communication between Development and Customer Support on these matters.

## MYS MANAGEMENT SERVICES

Date: April 15, 1998

To: Burton Grad  
Burton Grad Associates, Inc.

From: Martin Y. Silberberg

Subject: Timbuktu Development Due Diligence

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**STERLING  
COMMERCE**

James W. Hoyt  
Vice President  
Technology

Burst -

CONNECT: Remote is the re-labelled product. This will give you a good perspective on the strategic fit.

The checklist is just a starting point.

The Microsoft paper is background info.

Dennis Burns is taking care of the NBA.

Jim

## Due Diligence Checklist

<u>Sales, Marketing, Customer Service, Development Review</u>	<u>Done</u>
<i>Sales</i>	
1. Revenue history by product line.	
2. Mix of new sales vs. maintenance and add-ons.	
3. Sales organization - who and where are the sales people.	
4. Sales quotas and performance of each rep.	
5. Detailed compensation plans and payments.	
6. Sales training procedures, state of training for each rep.	
7. Backlog for current year.	
8. Methods of forecasting sales.	
9. Selling expenses and policies.	
10. Detailed pricing and discounting plans.	
11. Compare customer contracts, invoices, price lists for consistency.	
<i>Marketing</i>	
1. Advertising and promotion programs in place.	
2. Budgets for trade shows, ads, promotions.	
3. Customer testimonials and references.	
4. Volume and source of leads.	
5. Reseller and alliance situations.	



## Due Diligence Checklist

<i>Customer Support</i>	
1. Organization of support staff.	
2. Customer expectations for support.	
3. Outstanding customer problems.	
4. Past year history of problems and time to resolve.	
5. Any pending commitments to customers.	
6. Statistics & reports on product reliability and support requirements by product.	
7. Any customer satisfaction surveys or data that is available by product.	
8. Number of products and releases supported.	
9. Method of order fulfillment and documentation (in-house, contracted, etc.).	
10. Process of fix distribution.	
<i>Development</i>	
1. Organization / titles of people in development.	
2. Training and skill levels of development staff.	
3. Participation in technical or standards organizations.	

## Due Diligence Checklist

<u>Technical Review</u>	<u>Done</u>
<i>Product Functionality (breakout by product)</i>	
1. Major features / functions of the product.	
2. EDI standards supported and delivered with the product.	
3. Communications protocols supported & scripting supported; how many network scripts are shipped with the product.	
4. Usability of products (easy to set up partners, do maps, etc.).	
5. Ease of installation.	
6. Control features for managing and auditing processes.	
7. International features: <ul style="list-style-type: none"> <li>• Certification with international networks.</li> <li>• Specific features for international use (e.g. INS command set generator for U.K. users of the INS network).</li> <li>• Is the product "National Language enabled".</li> </ul>	
8. Security features and options.	
9. Hardware platforms & operating systems supported.	
10. Any special features for interfacing with other software products (e.g. GENTRAN interface with SAP and J.D. Edwards).	
<i>Product Quality</i>	
1. Change control process.	
2. Number, type, and frequency of system fixes.	
3. Quality assurance process.	
4. Open error correction activities.	

## Due Diligence Checklist

<i>Product Design and Implementation</i>	
1. Languages used for product development.	
2. Any special development tools used.	
3. Prerequisites for running product / runtime licenses required.	
4. Source of all program code.	
5. Software management tools used.	
6. Code review to assure no non-licensed use of code.	
7. Any proprietary notices in either source or object code for any products.	
8. Structure of code and quality of code documentation.	
9. Development methodology followed.	
10. Type of documentation for design specs and program specs.	
<i>Projects in Process</i>	
1. Current development projects (new products, ports to additional platforms).	
2. Current enhancement projects (releases).	
3. Outstanding commitments to customers.	

## Due Diligence Checklist

<u>Financial Review</u>	<u>Done</u>
<i>Financial Statements and Information</i>	
1. Audited financial statements & shareholder reports for past three years	
2. Detailed internal financial statements (annual, monthly, quarterly) for prior three years and current year to date with product detail. Include budget to actual and management discussions.	
3. General Ledger detail income statement & balance sheet for most recent year end and current year to date.	
4. Outside auditor's management letters for last three years.	
<i>Balance sheet and related information</i>	
1. Summary of cash and investment accounts, including list of restrictions.	
2. Accounts receivable detail and aging.	
3. Summary of receivable write-offs for last three years.	
4. Details of other receivables, inventory, prepaid expenses.	
5. Detail of fixed assets by major component.	
6. Summary of trade payables, other payables, and accrued liabilities	
7. Detail of bank loans, amounts outstanding under lines of credit and capitalized equipment leases broken down by current and long term classifications.	
8. Vacation policy & detail of accrual.	
9. Detail of any other assets or liabilities not specifically identified.	
10. Estimate of value of any assets or liabilities not on the balance sheet.	
11. Statement of whether the corporation has any net operating or capital losses that are available for carry forward.	

## Due Diligence Checklist

<u>Projected Financial Information</u>	<u>Done</u>
1. Estimated balance sheet at closing.	
2. Forecasted income statement and cash flow from most recent interim balance sheet to closing date. Revenue should be detailed by customer.	
3. Forecasted financial statements and cash flow for next three years.	
4. Copies of any current strategic plans, business plans, or external consultant reports on long range planning, product development, market research, pricing, or data processing.	
5. Capital spending requirements for next three years.	
<u>Tax Information</u>	
1. Federal and state/local tax returns for last three years.	
2. Analysis of current and deferred tax provision & liability accounts for last three years and most recent interim period to include summary of book/tax differences, reconciliation of tax provision from statutory rate to actual effective rate.	
3. Analysis of all permanent book/tax differences for last three years.	
4. List of states & foreign countries in which the company does business and a copy of income, franchise, and sales/use tax returns for each state plus copy of income tax returns for each foreign country for last three years.	
5. Status of Federal & State tax examinations currently in process, and a copy of any revenue agent reports received in prior or current examinations.	
6. Summary of book and tax basis of assets by major category with estimate of any investment tax credit or depreciation recapture inherent in the assets.	
7. Summary of any attribute carryforwards including investment tax credit, foreign tax credit, capital losses and net operating losses and alternative minimum tax net operating losses.	
8. Copy of any written tax sharing agreements or summary of any unwritten tax sharing agreements.	
9. Copies of the most recent (three years) tax returns filed by the corporation.	
10. Statement of the last year for which the corporation's federal tax returns were audited by the Internal revenue Service.	

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## Due Diligence Checklist

<i>Distributorships/resellers</i>	<b>Done</b>
1. List of distributors and resellers with description of each arrangement including provisions for sales, royalties, and cash transfers.	
2. List amounts receivable and liabilities owed in connection with each distributor and reseller as of the end of the most recent interim period.	
3. Summary of revenues generated by each distributor or reseller and related royalties received for the past three years and current year to date with forecasted revenues and related royalties for the next three years.	
<i>Other</i>	
1. List of any guarantees or commitments made on behalf of affiliates and shareholders.	
2. Summary of any profit sharing, stock option plans and bonus agreements in effect. Amount of such expenses for the last three years.	
3. List of major customers.	
4. Detail of license agreements which have not been billed or accrued in revenues.	
5. Schedule of any unusual or non-recurring items included in income for the last three years.	
6. Industry studies or statistics.	
7. List of all capital and operating leases.	
8. Organization chart and policy manual.	
9. Detail of any unrecorded purchase and sale commitments to customers, vendors, distributors, resellers, affiliates, and other parties.	
10. Description of the nature and amount of the backlog of unfilled purchase orders, the names and addresses of the major purchasers under those orders, and the extent to which that backlog is under firm commitments.	

## Due Diligence Checklist

<u>Human Resources Review</u>	<u>Done</u>
1. Listing of Employees by department.	
2. Current organization chart.	
3. Salary and compensation schedules.	
4. Any bonus and incentive plans.	
5. Documentation of profit sharing plan.	
6. 401 K documentation.	
7. Insurance programs. <ul style="list-style-type: none"><li>• Medical</li><li>• Dental</li><li>• Vision</li><li>• Life</li><li>• Short term disability</li><li>• long term disability</li></ul>	
8. Vacation policies.	
9. Leave of absence policy.	
10. Any additional general policies.	

## Due Diligence Checklist

<u>Legal Review</u>	<u>Done</u>
1. Corporation's articles of incorporation (or charter) and by-laws.	
2. Minute book, stock bond, and stock ledger.	
3. List of directors and officers and dates of positions held.	
4. States in which corporation is legally qualified to do business or does business and a description of activities in each state.	
5. Description of any business conducted outside the United States.	
6. Address of principal office and any other business addresses used within past year.	
7. All names under which the corporation is conducting business, or has conducted business within the past three years, and the states (or political subdivisions) in which and dates when those names were registered, recorded, filed, or otherwise protected as required by, or desirable under, relevant law.	
8. General description of the corporation's properties proposed to be transferred and their location.	
9. Description of the corporation's capitalization, including the (a) rights, (b) par value, (c) cost basis (used for tax purposes), and (d) number of shares outstanding in each class of stock.	
10. List of shareholders of each class of stock.	
11. Copies of all voting trust, irrevocable proxy, or shareholder agreements, redemption agreements, cross-purchase (buy and sell) agreements and other agreements restricting or otherwise affecting transfer or other rights pertaining to the corporation's shares.	
12. Copies of all permits and other qualifications issued to or filed by the corporation with any government agency relative to stock issuance.	
13. Description of all Securities and Exchange Commission registrations and all public issuances of stock, together with any registration statements, prospectus or offering circulars.	
14. Copies of the corporation's stock option or similar plans and list of persons with rights under such plans.	
15. List and description of all other options, warrants, calls, and commitments relating to the corporation's stock.	
16. Description of the corporation's debt: total amount, outstanding bonds, debentures, notes and other indebtedness, the due dates of each, rates of interest, and a list of the holders.	
17. Copies of all loan or similar agreements with any banks, financial institutions, or other financing sources.	

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4/8/98



## Due Diligence Checklist

<u>Legal (continued)</u>	<u>Done</u>
18. Copies of all pledges, conditional sales, mortgages, assignments and other security agreements the corporation has entered into with respect to assets it has purchased, owns or possesses, and assets it has sold or otherwise disposed of.	
19. List and description of all lawsuits, claims, or demands pending or threatened against the corporation. Include governmental agency or administrative proceedings, antitrust matters, tax claims and deficiencies.	
20. Detailed description of bad debts and agreements or arrangements that are expected to result in a loss.	
21. Copies of all warranties, guarantees, and other obligations given or incurred by the corporation with respect to its products or services, or disclaimers of those warranties, guarantees, or other obligations.	
22. Copies of the corporation's pension, retirement, profit-sharing, medical, health, and other incentive or fringe benefit plans (including relevant insurance policies).	
23. Copies of all other insurance policies held by, or in connection with, the corporation or its business, and the name of the corporation's insurance broker or agent.	
24. Description of the general policies on travel, entertainment, and similar expense.	
25. List and copies of the inventions, patent applications (with serial numbers and dates issued), copyrights, trademarks, trade names and computer program and similar rights, and evidence of any filings made or other protective measures taken.	
26. List and copies of all agreements and licenses the corporation has entered into with employees or others relating to inventions, patents, patent applications, trade secrets, confidential information (including customer lists), trademarks, trade names, and non-competition covenants.	
27. Description of any infringement claims or actions involving any of the corporation's proprietary rights (e.g. inventions, patents, trade secrets, copyrights, trademarks, and trade names).	
28. List and copies of employment contracts, labor union agreements and similar documents the corporation has entered into and a general description, detailed as appropriate, of all the employees.	
29. List and brief background statement (including education) about key employees and each employee whose annual compensation exceeds fifty thousand dollars.	
30. List and copies of leases, deeds, and all other material instruments relating to the corporation's interests (as owner, lessee, or otherwise) in real properties and improvements, and leases or other bailment agreements	

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4/8/98

## Due Diligence Checklist

relating to personal property instruments.	
--	--

## Due Diligence Checklist

<u>Legal (continued)</u>	<u>Done</u>
31. Copies of all contracts with commercial customers and governmental agencies, together with all related agreements concerning the treatment of any items for accounting purposes.	
32. Description of any security clearances issued by any governmental agencies under which the corporation is operating.	
33. List and copies of all the corporation's other contracts, agreements and instruments that are material to the conduct of its business, including business licenses, franchises, governmental approvals, customer and clientele agreements, distributor and agency franchises and agreements, sales representative agreements, outsourcing agreements, equipment or real property leases, and standard invoice and purchase order forms. Include copies of all standard purchase, sale and maintenance agreements, etc.	
34. Recent documentation and software screens indicating proprietary legends.	

**STERLING  
COMMERCE**Timbuktu

FAX

To: **Burt Grad**From: <sup>to</sup> **Dennis Byrnes**Company: **Burt Grad Associates**Phone: **614/791-5727**Phone: **203/222-8718**Fax: **614/718-1510**Fax: **203/222-8728**Date: **April 8, 1998**Number of pages: **15**Time: **5:18 PM**

Comments:

This fax is intended only for the use of the addressee. This fax contains information which we intended to send to the addressee only. In any event, if you are not the intended recipient of the fax, you are hereby notified that you have received this fax inadvertently and in error. Any review, dissemination, distribution or copying of this fax is strictly prohibited. If you have received this fax in error, please immediately notify us by telephone and return the original fax to us at the address below via the United States Postal Service. We will reimburse any out-of-pocket costs you incur in notifying us and in returning the fax to us. Thank you in advance for your cooperation.

Sterling Commerce, 4600 Lakehurst Court, P.O. Box 8000, Dublin, OH 43016-2000 614-793-7000 Fax 614-793-7092



**STERLING**  
COMMERCE

Warner C. Blow  
President and  
Chief Executive Officer

April 8, 1998

Burt Grad  
Burton Grad Associates, Inc.  
101 Post Road East  
Westport, CT 06880

*select  
non-disclosure  
for signature by:  
DeWayne, CAA  
+ others?*

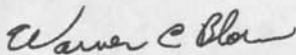
Dear Burt:

We have recommenced discussions with the company code named Timbuktu (the "Company") concerning a possible acquisition and have entered into a confidentiality agreement with them. As a part of our team, you must keep confidential and separate from your other work everything that you learn about the Company or the possible acquisition. Moreover, as an added precaution, we also require that you not even mention to anyone who isn't directly involved that discussions are taking place with the Company. There is a very small number of people directly involved, so you should contact Al Hoover at 614/791-6283 before discussing this with anyone.

These types of situations are very sensitive and using confidential information outside of analyzing the possible transaction or unnecessarily sharing it with others could not only jeopardize a possible deal, but could subject Sterling Commerce to significant liability under the confidentiality agreement.

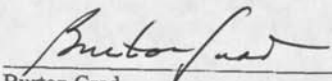
Please acknowledge your understanding of and agreement to the foregoing requirements by signing this letter and returning it to me.

Sincerely,



Warner C. Blow  
President and Chief Executive Officer


ACKNOWLEDGED AND AGREED TO:

 4/9/98  
Burton Grad

H:\acqu-pof\timbuktu\employee confidentiality-1tr2.doc

Timbuktes

Acknowledged and Agreed To:



BURTON GRAD  
[Print Name]

4/9/98  
[Date]

Apr-13-98 10:44A Burton Grad

914-631-1164

P.04

Acknowledged and Agreed To:

Martin Y. Silberberg

[Print Name]

04/13/98

[Date]

Apr-13-98 10:47A Burton Grad

914-631-1164

P.10

XcelleNet, Inc.  
December 13, 1997  
Page 6

If you are in agreement with the foregoing, please sign and return one copy of this letter which will constitute our agreement with respect to the subject matter of this letter.

Very truly yours,

STERLING COMMERCE, INC.

By: Albert K. Hoover  
Albert K. Hoover  
Senior Vice President and General Counsel

AGREED AND ACCEPTED this  
the 13th day of December, 1997.

XCELLENET, INC.

By: Martin Y. Silberberg CEO  
Its: \_\_\_\_\_

Martin Y. Silberberg 4/13/98



Apr-13-98 10:47A Burton Grad

914-631-1164

P.11

**STERLING  
COMMERCE**Warner C. Blow  
President and  
Chief Executive Officer

April 8, 1998

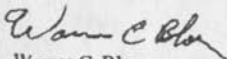
Dear Martin Silberberg:

We have recommenced discussions with the company code named Timbuktu (the "Company") concerning a possible acquisition and have entered into a confidentiality agreement with them. As a part of our team, you must keep confidential and separate from your other work everything that you learn about the Company or the possible acquisition. Moreover, as an added precaution, we also require that you not even mention to anyone who isn't directly involved that discussions are taking place with the Company. There is a very small number of people directly involved, so you should contact Al Hoover at 614/791-6283 before discussing this with anyone.

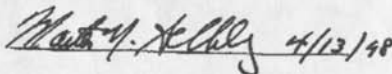
These types of situations are very sensitive and using confidential information outside of analyzing the possible transaction or unnecessarily sharing it with others could not only jeopardize a possible deal, but could subject Sterling Commerce to significant liability under the confidentiality agreement.

Please acknowledge your understanding of and agreement to the foregoing requirements by signing this letter and returning it to me.

Sincerely,

Warner C. Blow  
President and Chief Executive Officer

ACKNOWLEDGED AND AGREED TO:



H:\scu-pot\timbuktu\employee confidentiality-lyZ.doc

600 Lakeside Court, P.O. Box 8000, Dublin, OH 43016-2000 614-793-7000 Fax 614-793-7099

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914-631-1164

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 **STERLING  
COMMERCE**Warner C. Blow  
President and  
Chief Executive Officer

April 8, 1998

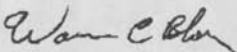
Dear Gary McSwain :

We have recommenced discussions with the company code named Timbuktu (the "Company") concerning a possible acquisition and have entered into a confidentiality agreement with them. As a part of our team, you must keep confidential and separate from your other work everything that you learn about the Company or the possible acquisition. Moreover, as an added precaution, we also require that you not even mention to anyone who isn't directly involved that discussions are taking place with the Company. There is a very small number of people directly involved, so you should contact Al Hoover at 614/791-6283 before discussing this with anyone.

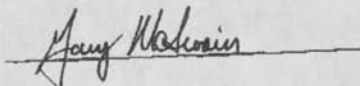
These types of situations are very sensitive and using confidential information outside of analyzing the possible transaction or unnecessarily sharing it with others could not only jeopardize a possible deal, but could subject Sterling Commerce to significant liability under the confidentiality agreement.

Please acknowledge your understanding of and agreement to the foregoing requirements by signing this letter and returning it to me.

Sincerely,

Warner C. Blow  
President and Chief Executive Officer

ACKNOWLEDGED AND AGREED TO:



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4600 Lakeshore Court, P.O. Box 8000, Dublin, OH 43016-2000 614-793-7000 Fax 614-793-7092

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914-631-1164

P.14

Acknowledged and Agreed To:

*Gary McLean*

*Gary McLean*  
[Print Name]

4-14-98  
[Date]

fax to 203-222-8728