SYNERGY® PROJECT INFORMATION MANAGEMENT SERVICE

Principal Agents, Principal Consultants, Project Managers and other Construction Professionals

This SYNERGY Service is a key Project Service as part of the e-CLOUD Construction® suite of productivity Services. It has been developed by: IQELA Software Solutions (ISS).

SYNERGY is available through the Internet via the e-CLOUD Construction website   www.e-cloud.co.za,

the ISS website Synergy | Information Management

INTRODUCTION

The SYNERGY Service provides the industry with an easy to use, low cost, method of managing Project information and documentation, using the latest information and communication technologies, on-line 24/7. It enables all members of the Project Team to have access to one, on-line repository of Project information and documentation. No special software needs to be loaded and the system is totally flexible to accommodate all existing Document and CAD drafting formats. It is a Web-based Service used by many companies in South Africa. Testimonials are available from, amongst others, the following companies

Davis Langdon, Aurecon, NMC, DHK Architects, Coffey Project Managers, Group Five, Stauch Vorster Architects, WBHO, Ariya Projects. CHES SYNERGY is used on the largest to the very smallest of Projects.

SYNERGY provides a "filing cabinet" in the "Cloud' for your construction Project. The 'filing cabinet' is accessed via the internet by any number of pre-authorised Project Team Members. This will generally include the Client as well as all Consultants, Contractors and Sub-Contractors etc. who are appointed for the Project. Any user can therefore access the information pertaining to the Project, at any time of day or night, from anywhere in the world, via the internet. They simply log onto SYNERGY via the internet with ID and Passwords provided. Users can be given full or limited access to the Project information, thereby keeping confidential documentation secure.

SYNERGY BENEFITS - GENERAL

Substantial savings will result if SYNERGY is implemented on a Project. Some examples of the benefits are as follows:

Benefit to the Client
- **Reduced printing and paper costs, resulting in savings on consultants disbursements**
- **No courier charges for sending drawings across the globe**
- **General savings due to the information distribution process becoming far more efficient and effective**
- **Potential savings resulting from no abortive work on site due to the use of outdated information**
- **All Project questions and queries are recorded, allowing for a full Audit Trail**
- **All Project e-mails are recorded**
- **All Project Team Members participate**
- **Project risk is reduced owing to greater Project Team co-ordination**
- **The monthly subscription fee is easily covered by the above savings**

Benefit to the Project Manager or Client's Agent
- **24/7 access to a record of the history of the entire Project, providing a defined Audit Trail**
- **The exact date and time that a drawing or document is "issued" is known, providing accurate and precise information**
- **Information movements, "action requests" and "notices" can be monitored in real time**
- **All queries, questions and requests are exposed. Notices are issued on time and "date-stamped"**
- **All e-mails sent between Project team Members are seen by the Project Administrator. Other Team Members only see the e-mails they have sent, received or were copied**
- **All Documents can be found easily through the defined Folder structure and powerful search facilities – forensic analysis is improved**

Benefit to the Consultants
- **Project administration is actively reduced**
- **Design co-ordination is improved**
- **Drawings can be issued 24/7 from anywhere**
- **Access is available to an accurate history of all drawings with their revisions and date stamp**
- **All queries, requests and answers are recorded**
- **Notices can be issued on time with date stamping**

Benefit to the Contractor and Sub-Contractors
- **Tender Documentation is consistent and the Tender process is refined**
- **Contract Agreements are available for reference.**
- **Construction Drawings are recorded accurately with an Audit trail. No dichotomy of "Approved Drawings" and revisions**
- **Access to Project information, from site, 24/7**
- **Accurate and precise Notices and Action Register, with comprehensive record of queries and answers**
- **Live drawing register that can be exported to Excel**

SYNERGY's FEATURES

- **A virtual "filing Cabinet"**
- **Easy-to-use – simplicity and reliability**
- **Intuitive interface**
- **Swift web application page response time and quick access to the Project information**
- **Powerful search facilities for finding information**
- **Secure information and user authentication**
- **User authorisation**
- **User event logging**
- **Multiple Project registration per user per Company**
- **Repository of every Document and its revisions, issued on a Project with date of issue**
- **Project information is auditable at all times, therefore Project transparency is improved**

SYNERGY has four main sections together with supplementary facilities:

- **DOCUMENT REGISTER**
- **TASK REGISTER**
- **E-MAIL REGISTER**
- **PROJECT CALENDAR**
- **SUPPLEMENTARY FACILITIES**

THE DOCUMENT REGISTER

The first section of the 'virtual filing cabinet' is used to store all Documents issued on the Project and is called the Document Register. The documents can include drawings, minutes, programs, site instructions, cost reports, long lead schedules and any other information deemed necessary for the Project.

The Document Register will generate the following immediate benefits for the Project Team:

- **No more working off old or incorrect drawing revisions:**
users simply check the website to ensure they are working off the latest drawings.
Drawings can be downloaded and viewed on screen or printed.
- **No more hunting for lost minutes before a meeting:**
all the minutes issued are on the website. The latest program can be accessed
immediately and site instructions are there for all to see at all times.
- **No more compiling of Drawing Registers:**
Documents can be sorted in any sequence by the user and a Register printed out. The system
automatically generates an up to date Drawing Register for each consultant, instantly.
- **No more disputes as to when drawings were issued and to whom drawings were issued:**
If the drawing has been posted to the website it has been issued. The user is now responsible to view the document on
the server. A notification is sent to all users by email when a document is uploaded.
- **No more printing forests of paper copies to distribute:**
Most users need an A4 or A3 drawing which can be downloaded to print or simply
viewed on screen.
- **No more sending reams of paper copies all over the globe:**
if a remote site is under construction. Large scale drawings can be either printed
on site or at the nearest print shop in any city.
- **No more having to collect drawings.**
The contractor prints drawings on site or collects from the nearest print shop. Drawings do not lie around
in the consultant's office for a few days before getting to site.

The Document Register has the following features:

- Comprehensive Document storage within pre-defined and user defined Folders (Categories)
- Drag and Drop Document uploading / downloading of single or multiple Documents, with uploading time-bars
- Uploading and storage of Document revisions, chronologically
- Every Document is date and time stamped
- Assigning of Document file types, Document type (Status), user tags and approval tag, in a Document's DNA
- Simultaneously use SYNERGY, while documents are uploading or downloading
- Secure Document viewing per Document and per User, with defined security groupings
- Reliable document backup
- Powerful quick and easy search and filter facilities to locate Documents
- E-mail notification to users, of new document uploads
- Export of Document Folders to Excel
- Document statistics are provided, sorted by their DNA characteristics
- The Document Register can be exported and downloaded as an Excel file

THE TASK REGISTER

This section of the 'filing cabinet' is used to store all queries and requests for information on the Project and is called the Task Register.

Any user can post a request for information in SYNERGY. For example: 'Issue structural drawing and rebar for 1st slab' or 'Details of lift shaft required'. When posting an action, the user selects the responsible person as a target user and the date by when the information is required. The System then automatically generates an e-mail and sends this action to the target users' email address. After the due date a daily email will be sent to both the author and the target to ensure action is taken on the outstanding request

The Task Register is therefore a central repository for all outstanding information, queries and requests by everyone involved in the Project. It can be easily monitored and printed out as a working document to be tabled at meetings.

The Task Register can be used by managers to monitor subordinates or the consultants' performance, by tracking the due date relative to the date the action was closed. It also gives insight into queries posted by all users on the Project and thereby enables the proactive management and monitoring of the Project.

- **No more going through your sent box to check which e-mails have not been answered.**
  All faxes sent and telephone calls made requesting information can be quickly summarised and posted to the Task Register, to ensure a permanent, up to date record is kept of all outstanding information ever requested on a Project.

The Task Register has the following features:

- Task items are queries or requests and are defined as "Task Types"
- All Task items are recorded
- All Project action items are stored
- Secure Task Register viewing
- Powerful quick and easy search and filter process to locate tasks
- Reliable Task backup
- Tasks can be sent to multiple users
- Tasks revisions can be sent
- Task responses can be sent
- E-mail notification of tasks is made
- E-mail reminder of upcoming scheduled tasks is made
- E-mail warning of overdue and late tasks is made
- The Task Register can be exported and downloaded to an Excel file

THE E-MAIL REGISTER

This section of the 'filing cabinet' consists of an e-mail Register. Each Project has a specific SYNERGY e-mail address. Project Team Members place this in the cc field on all e-mails they send relative to the Project. In this way the e-mail is sent to SYNERGY and a record is kept of every e-mail generated on the Project.

All users have access to the SYNERGY e-mail in-box and a sent-box in the Registry. Powerful search criteria, allows users to sort by author, date or subject and locate any e-mail they have received or sent on the Project.

- **No more risk if your computer crashes or is stolen:**
A safe record of all e-mails will be recorded on the server for the Project. Should any dispute arise involving communication via e-mail, the proof will be on the server.

The e-Mail Register has the following features:

- Stores a record of all e-mail correspondence between users on the Project
- The e-mails can be viewed 24/7
- Quick and easy search and filter facilities are used to locate any e-mail
- Record of e-mails sent to any 3rd party who is not a Project Team member

THE PROJECT CALENDAR

The Project Calendar provides a record of milestone dates, meeting dates etc., and is available to all project Team Members:

- **No more confusion as to when the next meeting will take place.**
All regular Project meetings, sectional completion dates and beneficial occupation dates can be loaded onto the Calendar for all to see, at the click of a button.

The Project calendar has the following features:
- Viewing of Calendar
- Defined "Calendar Groups" of users – e.g. Site Meeting Group
- Setting of "new event" by title, date, time, details, location, duration, repetition

SUPPLEMENTARY FACILITIES

These are support facilities that are provided as follows:

- **Synergy Playground**
  A facility, where new users can "try out" the SYNERGY System without affecting the content of a specific Project.
- **Gallery**
  A facility where Project images (photos) can be uploaded with date, then named and viewed.
- **Forum**
  A facility, where users can post messages, for all Project Team Members to see and respond to.
- **Activity Log**
  A facility providing, a record and "Audit Trail" of all activities through SYNERGY on the Project. It has powerful search capabilities.
- **Project Activity Statistics**
  A facility providing, graphical statistics on all "activity types" that have been carried out on the Project, within any time period.
- **Project Dashboard**
  A facility providing, a "snapshot" of the day's SYNERGY activities on the Project.

"USER" SECURITY

Security of usage is extremely important. so confidential information is only seen by "authorised" people and the Documents and information is stored in a completely safe and confidential manner. SYNERGY security has the following features:

- Password authentication.
- Passwords are encrypted on the Synergy server
- Synergy sends passwords to the respective password owners (users) only
- Users have different levels of authorisation according to which Security Group they have been assigned to
- Security information sent from server to internet browser is never stored on a client's machine. (Certain security protocols are handled in the background which the user is not aware of.)
- All information is sent over an encrypted connection. (1024 bit HTTPS)
- User authentication credentials are encrypted on our server.
- An authorisation system is used, ensuring that users only have access to information that has been granted to them.
- All communication between our servers and client devices (Web browsers, mobile phones, tablets) is encrypted with SSL
- digital certificates, to ensure the security of all information sent back and forth.
- We have developed an extensive logging system to track all user activity. Any activity can be tracked in real-time.
- Servers are protected by the latest firewall technologies
- Data integrity: All data stored by SYNERGY is replicated in real-time. All data is stored and backed up in three geographically separate locations in Europe. Hardware failures are automatically corrected without any storage downtime.

"CLOUD" SECURITY

SYNERGY utilises the latest versions of robust Microsoft server technologies. Microsoft tech was chosen as it stands above the rest as an industry standard for enterprise level solutions. The system uses "cloud" technology. The "cloud" provider is Amazon Web Services Inc. (AWS), which is an Amazon.com company. AWS is a world-leader in providing "cloud" products and services. The very same AWS technologies host the international Amazon online stores. All of the data for SYNERGY is stored and backed up in three geographically separate locations in Europe.

ARCHIVE RECORDS

On completion of the Project, a mini hard drive is issued, recording all the information pertaining to the Project. This will include every document in the Document Register, query in the Task Register and e-mail in the Email Register. Additionally, a reduced monthly fee is available for viewing access only.

SUPPORT

We support our users in the following ways:

- Online "Context sensitive help"
- "How-To" Video Tutorials that are downloadable
- A "Synergy Reference Guide" is available on-line
- A "Synergy Project Protocol Document"(PDF format) is available on-line
- Through a User query system
- Any queries can be sent to support staff, with quick response times via e-mail

SUBSCRIPTION

The SYNERGY Service is provided on a monthly subscription basis per Project, according to the size of the Project. Discounts are offered for multiple Projects running simultaneously. A once off set-up fee is charged that is equivalent to one month's subscription fee. This set-up fee includes:

- The setting up of a web site for a particular Project.
- Logging users onto the SYNERGY system. Individual users will be allocated usernames and passwords.
- One hours initial on-line training

For price information and to subscribe please click here