PTC Functional Specification

nSite Central

General Overview
Patterson nSite Central is a product suite allowing a corporate office to connect, manage, view and report against any number of nSite Central or straight EagleSoft installations. One portion of this software package is web–based, allowing corporate USERS to access and view information from CLIENT locations, while the other portion is an agent–based data mining system responsible for the collection and retrieval of pertinent information.

Terminology
- **QUERY** – A QUERY is either a USER–supplied or automated request for data from a CLIENT or CLIENT’s.
- **CLIENT** – A CLIENT is a group of computers located within the same dental office containing information solely relating to that office.
- **CORPORATE** – CORPORATE is a company that has purchased nSite Central in order to manage its CLIENTs.
- **USER** – A USER is any employee of CORPORATE who has an interest in viewing its financial records and/or client data.
- **ADMIN (ADMINISTRATOR)** – The ADMIN is an employee of CORPORATE who is responsible for system configuration, data–mining management, and overall system security, as well as creating and maintaining USER accounts.
- **REPORTING APPLICATION** – The REPORTING APPLICATION is a web–based graphical user interface that allows USERS to create QUERIES and view QUERY results.
- **CORPORATE I.S. MANAGEMENT APPLICATION** – The CORPORATE I.S. MANAGEMENT APPLICATION is a web–based graphical user interface that allows ADMIN to manage USERS, configure site settings (including security and data–mining settings), create QUERIES, and view QUERY results.
- **nSite Central** – nSite Central is the name used to refer to the overall software package detailed in this document.
- **EagleSoft** – EagleSoft is the name used to refer to the software package run at CLIENT locations.
- **CPDL (Centralized Performance Data Layer)** – The CPDL is a module that contains a database which stores the results of USER–submitted and automated QUERIES.

Functionality Targets
This group of functional items is considered the minimum requirement specification for initial design and release.

- **nSite Central Registration** – The software package is installed by a Patterson Employee, after which the ADMIN account is configured. ADMIN’s password
is hardcoded into the software, allowing for static login; this ensures that ADMIN is guaranteed login access under any/all circumstances.

- **CORPORATE I.S. MANAGEMENT APPLICATION Configuration (ADMIN Login)** – Using this interface, ADMIN can change all site settings.
- **USER Creation** – Any USER accounts must first be created by ADMIN. USERS may not create their own accounts. Upon creation, USER has no privileges; all subsequent privileges must be granted to USER by ADMIN.
- **USER Login** – Once a USER’s account has been created, the USER may login and use services for which s/he has access.
- **QUERIES** – Once a USER has QUERY privileges, the USER may submit a customized QUERY to the CPDL. The CPDL executes the QUERY and returns the results to the USER in table form.

**Additional Functionality**
This group of functional items is considered long-term goals but do not need to be present in initial design or release.

- **Scheduled QUERIES (Automated Reporting):** A USER may subscribe to a QUERY, after which s/he will receive reports in PDF format automatically via email of the results of the QUERY.

**Excluded Functionality**
This group of functional items has been discussed thoroughly and is considered as not required.

- **Data Mining Agent System:** Data mining agents handle custom QUERIES, which are created by USERS to compile desired information from specified CLIENT locations.

**User Stories**

- **CORPORATE requests nSite Central package**
  1. CORPORATE sends request for an nSite Central package.
  2. Request is processed.
  3. Software package is sent to CORPORATE.
  4. CORPORATE receives package.
  5. Software is installed on CORPORATE’s server.

- **ADMIN account is configured**
  1. Software is installed on the server.
  2. ADMIN logs on to CORPORATE I.S. MANAGEMENT APPLICATION with hard-coded password.
  3. ADMIN configures settings for site.

- **USER requests account from ADMIN**
  1. CORPORATE sees need to add an additional USER account.
  2. New USER submits desired username and password to CORPORATE, which gets forwarded to ADMIN.
     a. If username already exists, ADMIN will select a new username for USER that has not been previously used.
b. **ADMIN** will retain **USER**’s original password.

3. **ADMIN** logs on to **CORPORATE I.S. MANAGEMENT APPLICATION**.
4. **ADMIN** navigates to **USER** management interface.
5. **ADMIN** creates new **USER** account with default privileges using the username and password combination generated in Step 2.
6. New **USER** account is ready for use.

- **USER** subscribes to reports
  1. **USER** wishes to receive reports of the results of automated **QUERIES** via email.
  2. **USER** logs on to **REPORTING APPLICATION**.
  3. **USER** navigates to automated **QUERY** section.
  4. **USER** selects **QUERY** or **QUERIES** s/he is interested in following.
  5. **USER** submits request through a form.
  6. **REPORTING APPLICATION** returns a page with either a “Subscription successful” or a “Subscription failed” message.
  7. **REPORTING APPLICATION** sends **USER** a confirmation email if successful.

- **ADMIN** deletes **USER** account
  1. **USER**’s account is no longer valid for any number of reasons:
     a. **USER** has done something worthy of account deletion.
     b. **USER** was fired from **CORPORATE**.
     c. **USER** is no longer an employee of **CORPORATE**.
     d. **USER**’s account has been compromised.
     e. Any other reason deemed appropriate by **ADMIN**.
  2. **ADMIN** logs on to **CORPORATE I.S. MANAGEMENT APPLICATION**.
  3. **ADMIN** navigates to page that displays a complete list of **USER**s for **CORPORATE**.
  4. **ADMIN** selects account of **USER** that was deemed worthy of deletion.
  5. **ADMIN** deletes **USER**’s account.
  6. **USER**’s account is no longer present within **nSite Central**.

- **nSite Central** data mining service fails, **ADMIN** still logs in
  1. One of several possible failures occurs:
     a. The data mining management system of **nSite Central** fails.
     b. **REPORTING APPLICATION** fails.
  2. **ADMIN** logs on to **CORPORATE I.S. MANAGEMENT APPLICATION**.
  3. **ADMIN** views error logs to determine the problem.
  4. **ADMIN** determines the appropriate course of action.

- **ADMIN** creates connection with **CLIENT**
  1. **CORPORATE** wishes to add a new **CLIENT** to **nSite Central**.
  2. **ADMIN** logs on to **CORPORATE I.S. MANAGEMENT APPLICATION**.
  3. **ADMIN** navigates to connections page, which displays list of all **CLIENT**s currently connected.
  4. **ADMIN** clicks “Add new client” button.
  5. **ADMIN** is taken to a new page with a form to be completed.
  6. **ADMIN** supplies necessary information.
  7. **ADMIN** submits form.
8. New CLIENT connection is added to overall CLIENT connection list with its current connection status.

- **ADMIN** changes USER privileges
  1. One of several possible reasons exists for USER’s privileges to be changed:
     a. USER desires his/her settings to be changed.
     b. CORPORATE deems it necessary to change privileges for a particular USER.
  2. If CORPORATE approves privilege modifications for a USER, permission is given to ADMIN to make the changes.
  3. ADMIN logs on to CORPORATE I.S. MANAGEMENT APPLICATION.
  4. ADMIN navigates to USER management interface.
  5. ADMIN selects USER for whom privileges need to be changed.
  6. ADMIN makes necessary changes to USER’s privileges.
  7. USER’s new privileges are now in place.

- **USER** login
  1. USER wishes to access REPORTING APPLICATION.
  2. USER navigates to login page of REPORTING APPLICATION.
  3. USER enters username and password.
  4. USER is now logged in to REPORTING APPLICATION.

- **USER** creation of QUERIES
  1. USER wishes to send a QUERY to CPDL.
  2. USER requests appropriate privileges from ADMIN.
  3. Upon receiving necessary privileges from ADMIN, USER logs in to REPORTING APPLICATION.
  4. USER navigates to QUERY creation interface.
  5. USER creates a custom QUERY and submits it to CPDL.
  6. CPDL returns the results to USER in table form.
Modules Affected By Scope

- N/A:

Report Additions

- **QUERY Reports**: Query Reports are reports generated by USER-supplied QUERIES that are displayed in table form on a Web page within the REPORTING APPLICATION.
  a. Filtering / Retrieval Needs
     o Filter by CLIENT location
     o Filter by Date Submitted
  b. Report Categories
     o N/A

- **Automated Reports**: Automated reports are scheduled reports generated from the results of automated QUERIES performed by data-mining agents. USERS may subscribe to automated reports and receive them by email in PDF form.
  1. Description
     a. Filtering / Retrieval Needs
        o N/A
     b. Report Categories
        o N/A

Report Modifications

- N/A:
User Security Additions

- **Submit QUERY:** This level of security ensures that any QUERY submitted to the CPDL is properly formatted and will not produce any malicious results.
  1. Check Access:
     a. **USER** List: Check QUERY privileges for USER who is submitting the QUERY.
  2. Dependant Security:
     a. N/A
  3. Additional Product Listing:
     a. **EagleSoft**
  4. License Needed:
     a. **nSite Central, EagleSoft**
  5. Default Value:
     a. Disallow

Departments / Representatives

- **Development**
  1. Jim Garrett, Software Development & Quality Assurance Manager
Approval & Sign Off

The undersigned members of the PTC Development Team agree upon this design and accept it in its entirety as a functional target.

Software Development & Quality Assurance Manager

Product Manager

DBA / Data Architect

Senior Quality Assurance Technician

Senior Software Engineer

Senior Software Engineer

Senior Software Engineer (optional)

Senior Software Engineer (optional)
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