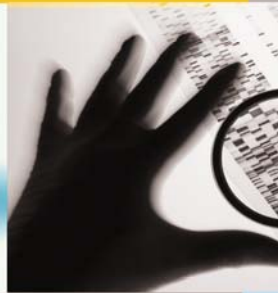
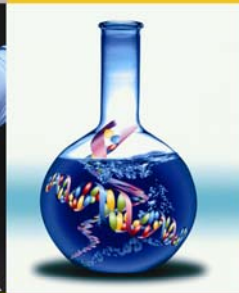




PROTOCOL EXECUTION  
AND  
TRANSFORMATION TOOL

Research

Analysis



Execution

Report

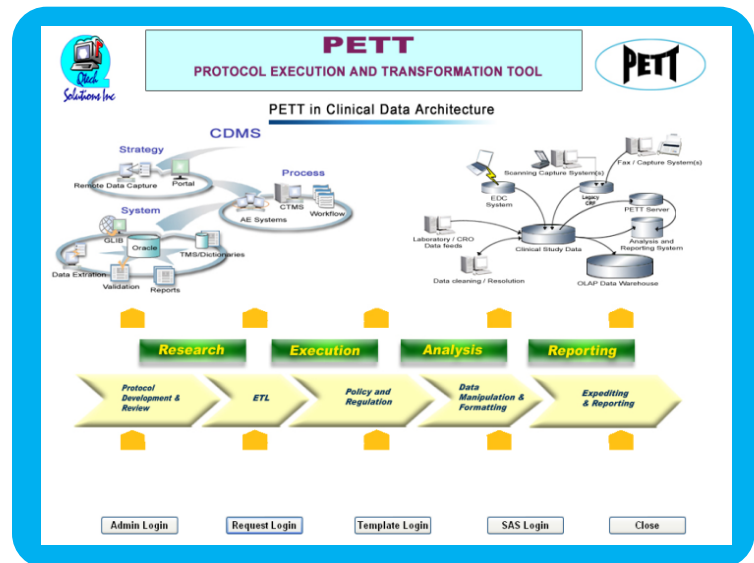
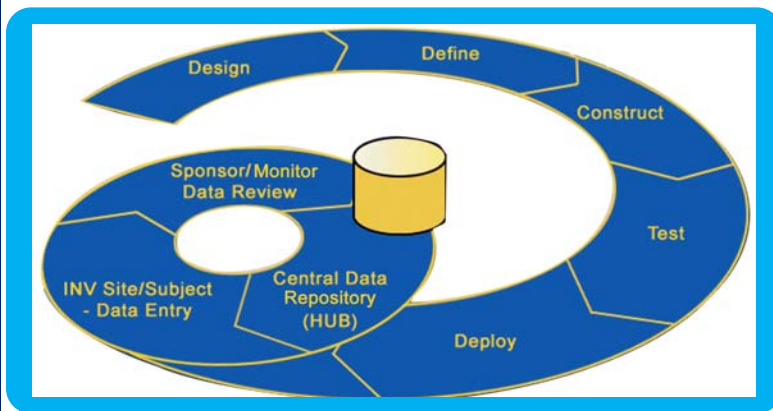
Protocol Execution and Transformation Tool

*Qtech Solutions Inc*



# PETT (Protocol Execution and Transformation Tool)

By keeping attention on necessities and requirements of Researchers, Analysts, Scientists, Statistician and SAS Professionals who are involved in the field of Clinical Trials, Financial, Insurance, SAS, etc., Qtech-Solutions Inc. has developed **Protocol Execution and Transformation Tool**. PETT is an advance intelligence Internet (TCP/IP) Software Application based on Server-Client Model. PETT usages C, C++, TCP/IP Socket Programming, PAM, Multithreading and MySQL5.0 Database on Linux/Unix Server as backend for Server side activities and managements whereas C#.NET and SQL Server2000/MySQL5.0 is used for frontend on Window Client side activities and managements. PETT will be useful to find/track accurate data/result count quickly from database based on specified criteria/logics. Professionals who are involved into Clinical Trials I-IV, Statistical, Financial, Insurance, SAS, etc. fields can utilize PETT to get accurate results to generate reports quickly from database by using its standard logical and analytical capacities which helps them speed up their work and reduce budget by saving time and cost towards work process. By providing minimal training and support to professionals, they can utilize its user friendly operation easily



## Key Features / Component Highlights

- Apply available logics/criteria to execute and get accurate result from database
- Multi layer inputs selection facility based on Parent-Child relationship
- Use customize logic/criteria to get desired results based on requirements
- Use all possible SQL syntax on Data Tables and User Defined Tables
- Edit or reconfigure your previous logics/criteria as per your requirement
- Create Text File, Report and SAS Dataset/Dashboard as per requires logic/criteria.
- Create your own optional field/variable base on existing Data Tables using **Adhoc** Button.
- Find out counts of value for existing field/variable using **Distribution** Button.
- Check your logic/criteria using **Syntax Checker** Button facility.
- Re-execute your Process /Template/Project as your requirement.
- Update data into database simultaneously
- Save your Template/Project/Files into specified location.



# About PETT

- The New Research Reporting and Data Management Tool. PETT helps in Standardization of Business Process. Builds templates for repeatable lead file generations.
- PETT is a Custom designed application tool, which Enhances Mining of data, Manipulation of data and for Statistical Analysis and Reporting in support to Research Activities.
- PETT is an end –to-end tool from request building thru reporting /dashboard using SAS in UNIX environment.
- PETT has pug-in to any kind of database and can streamline execution processes in Pharmaceutical, Financial, Insurance and Health Care Domains.
- PETT is a Cost effective tool with increased productivity.
- It helps to build Standard templates for like protocols designs to avoid repeatable executions across teams towards process standardization.



## Core Benefits

- Save in approx 50% reduction in process/ execution times.
- Enhanced Process Improvement as savings to max of 35% on investment.
- Enhances Execution and Standardizes workflow.
- The tool is in par with FDA software development guidelines.



## PETT Components and Users Benefits

### This Tool has 3 Basic Components

#### **Request Builder: For Research Managers / Associates and Business Analyst**

- Enables user to build documents for template design as Adhoc request.
- Document tracking and managing documents required for submission per request.

#### **Template Builder: For Data Analyst / Computer Programmers**

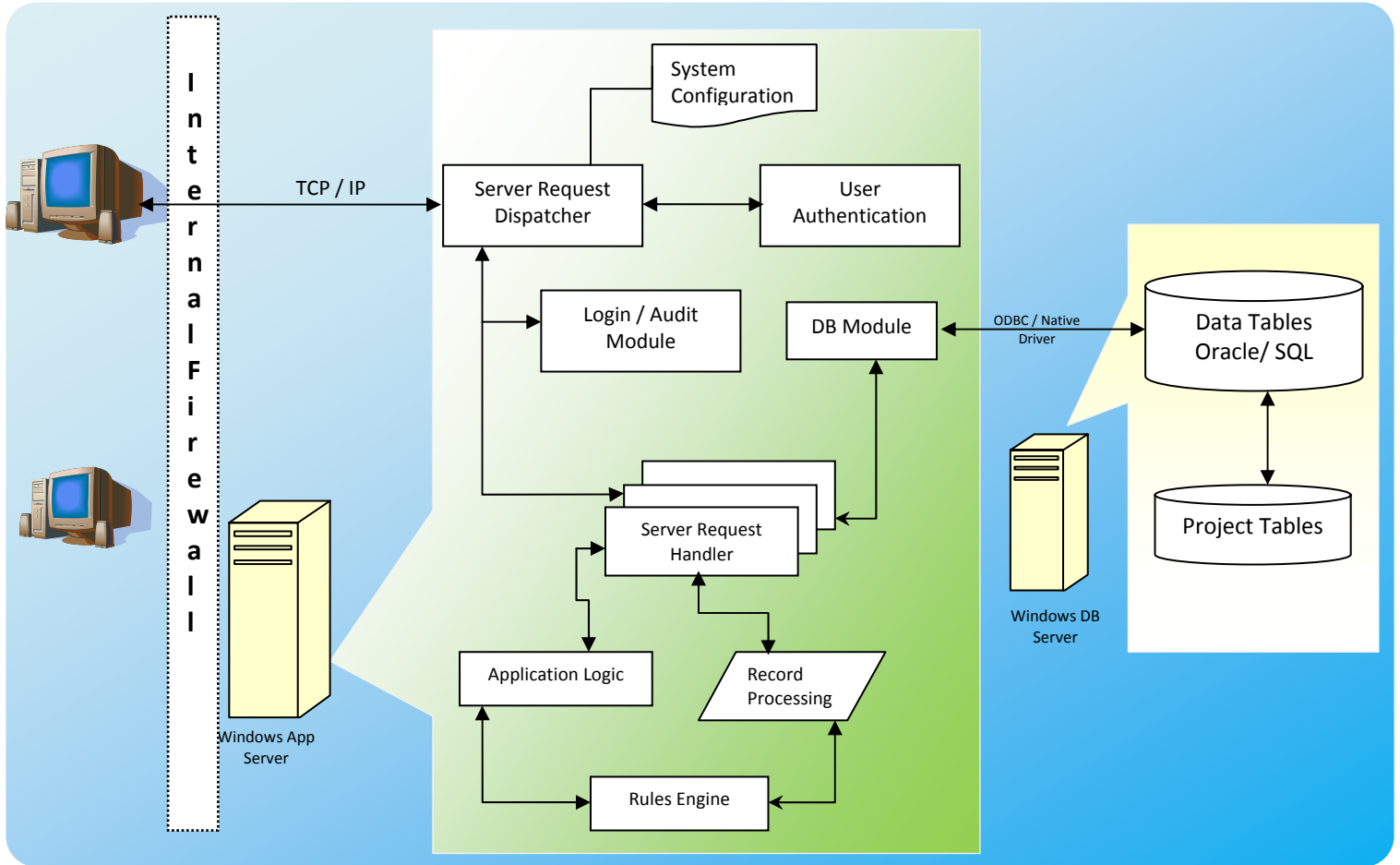
- User can build standard templates per Adhoc request and can query, join, segment sample and output the data.
- The logic and creation of new Adhoc fields can be applied within the tool as per request.
- Allows the user to create a SAS dataset.
- This component has Plug-ins to Database.

#### **Report Builder: For Biostatistician / Statistical Programmers**

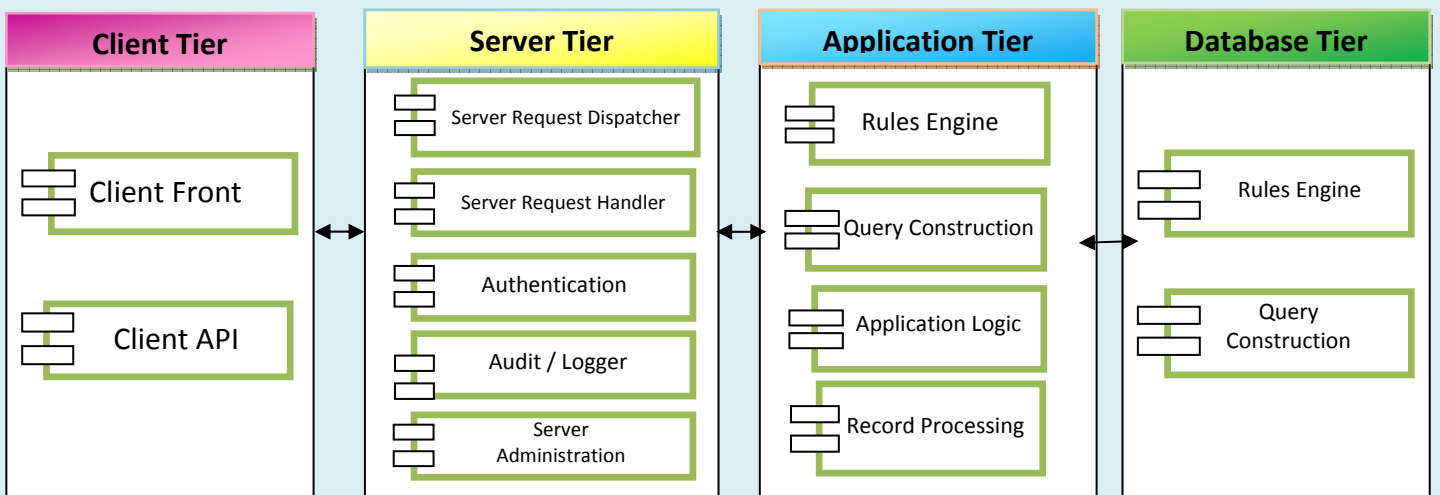
- Allows User to perform statistical analysis and reporting under SAS environment per protocol SOPs and be in compliance to standards.
- This component has Plug-in to SAS Environment.



# System Architecture



# Logical Application Design



**Protocol Execution Transformation Tool**

# Key Benefits

- PETT is Advance intelligence Internet based Software Application.
- Multi user's connection facility with Server.
- Build your Project/Template to analyze and complete your research and development.
- Quickly, accurate retrieval of data/results from MySQL5.0 Database.
- Standard logical and analytical capacities.
- Reduce time and cost towards research process.
- Capacity to apply simple as well as complex SQL logical syntax
- Capacity to apply complex Procedural syntax.
- Produce and generate reports from database quickly.
- High capacity to analyze and complete your research and development process.
- User friendly operation and navigation process.
- High level authentication and validation check capacity
- PETT is LAN/WAN based Software Application. Hence it is worldwide accessible.



# Key Modules

- All key modules of Server, Application and Database are developed using C, C++, TCP/IP Socket Programming, PAM, Multithreading and MySQL5.0 as backend on Linux/Unix Server.
- All key modules of Client side are developing using C#.NET, SQL Server2000/MySQL5.0 as Front end on Window Operating System.

# Configuration Management

## Linux Server Configuration

### Software:

Linux/Unix Server Version 2.4 and above

MySQL5.0 and above

Necessary DB access permissions to PETT-Admin-ID

Necessary DB access permissions to UserID.

<b>Hardware:</b>	RAM	4GB
	HD Drive	9GB
	LAN/WAN	Connectivity

## Window Client Configuration

<b>Software:</b>	Window O/S
	.NET 2.0 Framework
	SQL 2000/MySQL5.0 Server

<b>Hardware:</b>	RAM	512 MB
	HD Drive	1GB
	Processor	1.90 GHz
	LAN/WAN	Connectivity

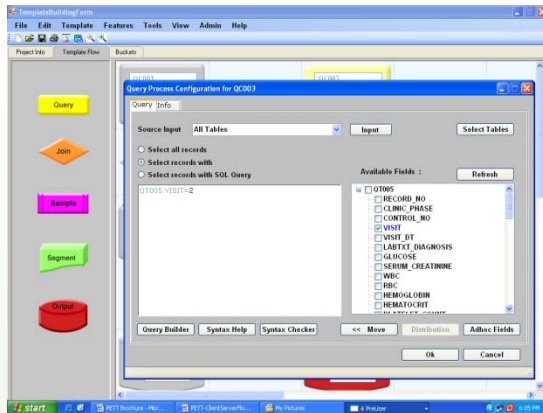
- LAN/WAN connectivity with Server and Client are compulsory for PETT.
- Server uses important configuration files to extract specific value and path from that.

# Security Management

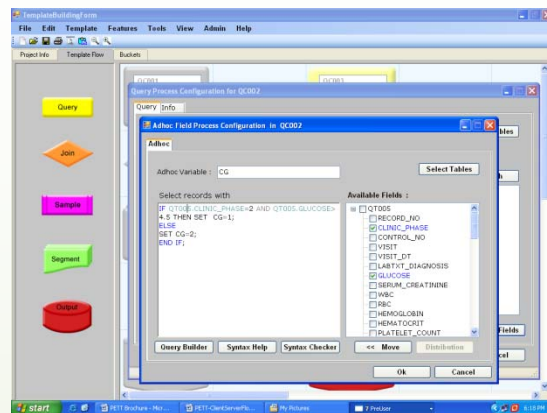
- High level security check for UIDs validation and authentication using PAM.
- High level authentication check on Database level and Table level for UIDs.
- Strict protection on general users for unauthorized activities.
- Based on status, update login, activities and data information simultaneously.

# PETT Customisation

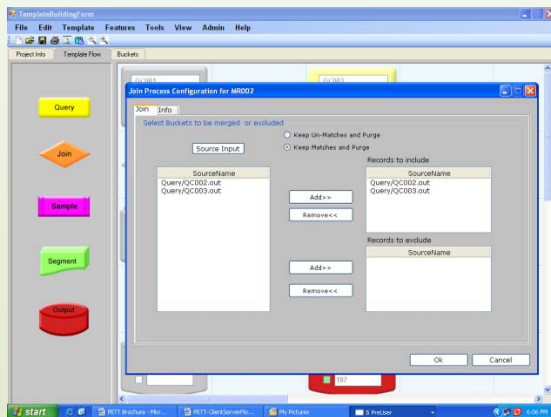
PETT having customization features which can be used to customize result counts /data as per user willingness and necessity. User requires to select/input desire option/criteria which would be available on Process Edit/Configuration Box



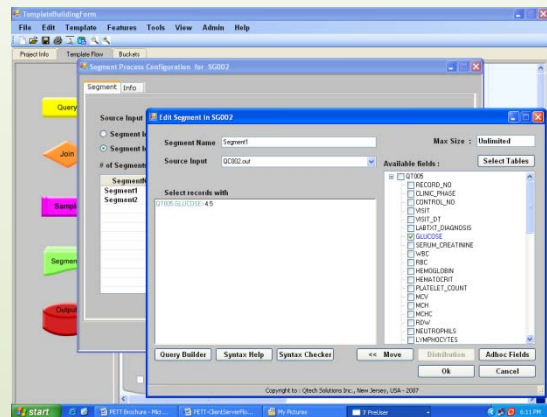
a) Query Configuration Box



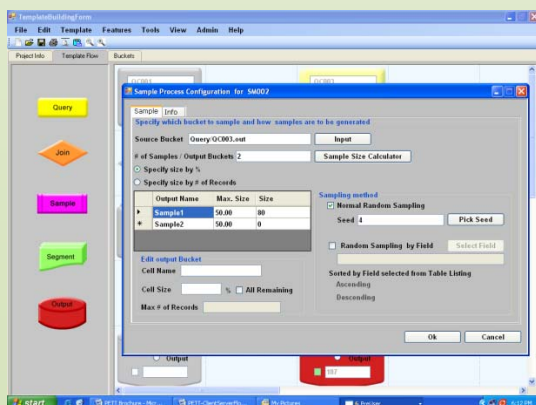
b) Adhoc Field Configuration Box



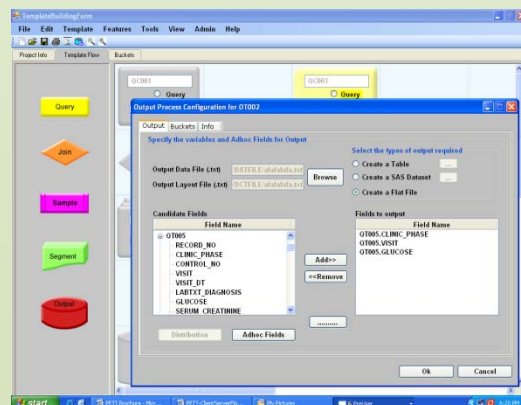
c) Join/Merge Configuration Box



d) Segment Configuration Box

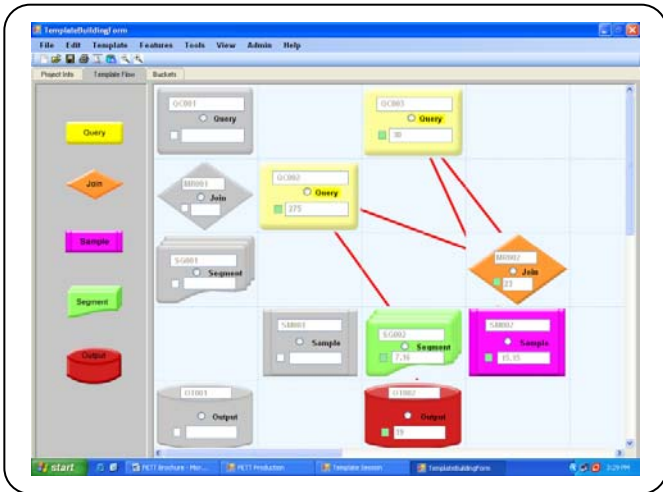


e) Sample Configuration Box



f) Output Configuration Box

Qtech-Solutions Inc. commits you to provide training, support and manual towards PETT utilization and operation through expert professionals. Based on client requirement and request, Qtech-Solutions will try all the best for necessary modification or changes into existing PETT quality.



The screenshot shows the 'SAS Dataset Creation Screen' dialog box. It has two panes: 'User created Data file' and 'Selected Data file'. The 'User created Data file' pane shows a tree view with 'phaser' selected. The 'Selected Data file' pane is empty. Below the panes, there are radio buttons for 'Create a Table', 'Create a SAS Dataset', and 'Create a Flat File'. The 'Create a SAS Dataset' option is selected. There is also a 'Fields to output' list with the following items: OT005, CLINIC\_PHASE, OT005\_VISIT, and OT005\_GLUKOSE. At the bottom, there is a text field for 'Name of SAS Dataset' and 'Execute' and 'Cancel' buttons.

**Using Create SAS Dataset option**

The screenshot shows the 'Output Process Configuration for OT002' dialog box. It has a 'Candidate Fields' list with the following items: RECORD\_NO, CLINIC\_PHASE, CONTROL\_NO, VISIT, VISIT\_DT, LABTEXT\_DIAGNOSIS, GLUCOSE, and SERUM\_CREATININE. There is a 'Distribution' button and an 'Adhoc Fields' button. On the right, there is a table with the following data:

Field Name	output
RECORD_NO	
CLINIC_PHASE	
CONTROL_NO	
VISIT	
VISIT_DT	
LABTEXT_DIAGNOSIS	
GLUCOSE	
SERUM_CREATININE	

At the bottom, there are 'OK' and 'Cancel' buttons.

**Using Distribution Button**



**PROTOCOL EXECUTION  
AND  
TRANSFORMATION TOOL**

## Qtech Solutions Inc

“Qtech Solutions Inc.” is a New Jersey (USA) based company founded in 1999. We are Specialize in Clinical Research / Data Management / SAS(R) Software Solutions for various Pharmaceutical, Clinical Organizations. We provide product development services to various pharmaceutical, biotechnology, and medical device industries in support for conducting clinical trials from Phase I through IV. Qtech professionals bring in scientific, regulatory, IT and Clinical Research expertise for the completion of timely, accurate and cost-effective trials. Our services have benefited organizations to process data more efficiently, to reduce time and increase profit benefits for patent-protected products.

Web: <http://www.qtech-solutions.com>

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