## Hardware Requirements

### Application Server
- **Operating System:** 64bit Windows
- **Processor:** Quad Core 2.5Ghz equivalent.
- **Memory (RAM):** 8GB+
- **Hard disk space (Software):** 11GB
- **Hard disk space (Documents):** 50GB (Assumes 500k reports.)

### Database and Processing Server
- **Operating System:** 64bit Linux OR Windows
- **Processor:** Quad Core 2.5Ghz equivalent.
- **Memory (RAM):** 12GB+
- **Hard disk space (Software):** 4GB
- **Hard disk space (Documents):** 50GB (Assumes 500k reports.)

## Technical Staff Requirements

Technical Staff will be involved during: Installation of TIES; Importing of the documents from your institution’s systems; and, maintenance of TIES post implementation.

*### Installation (1-3 Weeks)*

**Junior Programmer/DBA (0.5 FTE):** Will install TIES system and assist in data import.

*### Data Load (4-6 Weeks)*

**Senior Programmer (1 FTE):** Will assist in configuring data feed from clinical system

Estimates are based on the assumption that a custom software solution will need to be implemented to import data from the institution’s systems into TIES and 500k reports are to be processed.

*### Quality Assurance (3-4 Weeks)*

**Junior Programmer/DBA (0.5 FTE):** Performs Phase 1 and 2 QA.

**Domain Expert (0.5 FTE):** Performs Phase 3 QA

## Administrative Staff Requirements

Administrative staff will be required to support users of the system.

**Help Desk Support (0.3 FTE)**

**Administrator (0.3 FTE):** Will create user and study accounts.

**Account Request Reviewer (0.2 FTE):** Will review requests for user accounts and approve or disapprove based on institution’s policies.

**Trainer (0.2 FTE):** Will hold training sessions for users on request.

Estimates are for supporting 10 new users per month through registration, getting access, training and order fulfillment.

## Maintenance

**Junior Programmer/DBA (0.5 FTE):** Will monitor periodic import activity, update TIES system when upgrades are available and support administrative staff in daily operations

*FTE: Full Time Employee*

*TIES Team will be available to provide support as and when needed through user forums and scheduled office hours*