

## Server Hardware

- Core i5-10600K or better
- 4 GB RAM minimum, 8 GB RAM for databases up to 50,000 cases, 16 GB RAM for any number over 50,000
- 25 GB available hard drive space; 50 GB or more recommended
- Fixed IP address for HL7 router (CAS service hosts only)
- Backup hardware and software. Daily backups of CNE<sub>x</sub>T/CAS databases recommended

**Note:** A dedicated server is *not* required and may be virtualized. No requirements for monitor, keyboard, and other peripherals. CAS servers must be on 24/7 to record messages. CAS services must be able to access a CNE<sub>x</sub>T database server if the databases are hosted on separate machines.

## Server Software

- Windows Server 2016 through 2019
- SQL Server
  - SQL 2017; SQL 2012 through 2017 – use MSOLEDBSQL for TLS 1.2
  - SQL 2019; we found that the combination of SQL 2019 and TLS 1.2 was not compatible with MSOLEDBSQL
    - For installations using TLS 1.2, use SQLOLEDB.1 or SQLNCLI11
    - For installations not using/enabling TLS 1.2, MSOLEDBSQL will function correctly
- Backup hardware and software (recommended daily backups of CNE<sub>x</sub>T/CAS databases)
- Web access to C/NET Solutions Collaboration Site for Software Downloads

**Note:** A dedicated SQL Server instance is not required for CNE<sub>x</sub>T or CAS. The same database server may be used for both CNE<sub>x</sub>T and CAS databases.

## Workstation Hardware

- Core i5 or better
- 4 GB RAM minimum, 8 GB RAM recommended
- 10 GB available hard drive
- Windows compatible printer

## Workstation Software

- Windows 10 or 11
- Microsoft Office 2013, or later, Professional Edition (to include Word, Excel, and Access)(Installed on the workstation CNE<sub>x</sub>T is installed on, online versions are not acceptable)
- Web access using Internet Explorer 11 or later; Firefox 3.7 or later, Google Chrome
- Email client
- WinZip or equivalent application

**Note:** For management of SQL Server, Microsoft SQL Server Client utilities (with appropriate users and permissions granted on all product databases) are recommended.

## Latency

To ensure that CNE<sub>x</sub>T works properly, your connection needs to be reliable and constant. If you are accessing CNE<sub>x</sub>T remotely you need a high-speed internet connection that is stable. The further the databases are from the CNE<sub>x</sub>T installation the higher the risk of network instability and connectivity issues.

**Cancer Alert System (CAS) Specific Requirements (Applies if licensed for CAS only)**

The Cancer Alert System (CAS) automated case finding system at your facility will send potential cases into CNE<sub>x</sub>T. CAS can currently receive HL7 message feeds of BAR, ADT, and/or ORU messages from multiple departments such as pathology, hospital admit/discharge (BAR preferred), radiation oncology and imaging.

**BAR or ADT Message Requirements**

- Messages in HL7 format 2.1 or higher
- BAR^P01 or ADT^A08 message type/trigger event (BAR preferred)
- Messages must contain a facility wide unique identifier (called Medical Record in the CNE<sub>x</sub>T case database) for matching messages to the CNE<sub>x</sub>T database
- MSH-9.1, MSH-9.2, MessageType and TriggerEvent fields must be filled with legitimate values
- MSH-10, MessageControlID fields must be filled with legitimate values
- At least one DG1-3.1, DiagnosisCode, field MUST be present and filled with a valid ICD-9 or ICD-10 diagnosis code for determining if the message is or is not cancer related; (multiple DG1 segments, therefore multiple diagnosis codes, are allowed)
- A DG1 field must be filled with values to indicate ICD coding system (ICD-9 or ICD-10)

**ORU Message Requirements**

- Messages in HL7 format 2.1 or higher
- ORU^R01 message type
- Messages must contain a facility wide unique identifier (called Medical Record in the CNE<sub>x</sub>T case database) for matching messages to the CNE<sub>x</sub>T database
- MSH-9.1, MSH-9.2, MessageType and TriggerEvent fields must be filled with legitimate values
- MSH-10, MessageControlID fields must be filled with legitimate values
- At least one OBX-5, ObservationValue, field MUST be present and contain legitimate text that the software can evaluate for cancer; (multiple OBX segments are allowed)