Hardware and Software Requirements

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 CNExT/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 CNExT database server if the databases are hosted on separate machines.

Server Software

- Windows Server 2012 or later
- SQL 2012 through SQL 2017; SQL 2019 is under evaluation and not currently supported (for CNExT SQL databases and for servers hosting CAS)
- Backup hardware and software (recommended daily backups of CNExT/CAS databases)
- Web access to C/NET Solutions Secure Server (SFTP) for software updates

Note: A given SQL Server instance need not be dedicated to CNExT or CAS. Also, a single database server may be used for both CNExT and CAS if desired. It is possible to use a workstation with SQL Server installed as either a CNExT or CAS server – though this practice is not recommended as a permanent solution.

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 later
- Microsoft Office 2013, or later, Professional Edition (to include Word, Excel, and Access)
- Internet Explorer 11 or later; Firefox 3.7 or later, Google Chrome (for technical support and transmitting cases electronically: internet, FTP, and email access)
- Email client
- WinZip or equivalent application
- Web access to server and web access to C/NET Solutions Secure Server (SFTP) for updates and Customer Website

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 CNExT works properly your connection needs to be reliable and constant. If you are accessing CNExT remotely you need a high-speed internet connection that is stable. The further the databases are from the CNExT installation the higher the risk of network instability and connectivity issues.

Cancer Alert System (CAS) Specific Requirements

The Cancer Alert System (CAS) automated case finding system at your facility will send potential cases into CNE$_X$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 CNExT case database) for matching messages to the CNExT 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 CNExT case database) for matching messages to the CNExT 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)