Hardware and Software Requirements

Server Hardware
- Intel Quad Core microprocessor, 2.6+ GHz or better
- 4 GB RAM or better
- 25 GB available hard drive space; 50 GB or more recommended
- DVD or CD drive (installation media)
- Backup hardware and software. Recommended daily backups of CNExT databases

  Note: A dedicated server is not required and may be virtualized. No requirements for monitor, keyboard, and other peripherals

Server Software
- SQL Server 2005 (through April 16, 2016), SQL Server 2008, SQL Server 2008 R2, SQL Server 2012, SQL Server 2014 (for CNExT with SQL and for CAS)
- Web access to C/NET Solutions Secure Server for updates

Workstation Hardware
- Recent Intel Xeon or Core 2 Duo microprocessor, or better (equivalents, such as from AMD, are also acceptable)
- 10 GB available hard drive space or more
- DVD or CD drive (installation media)
- Video card and monitor capable of displaying 1024 x 768, 32 bit color or better
- Network access to server and web access to C/NET Solutions Secure Server for updates
- Windows compatible printer
- Reliable backup method strongly recommended

Workstation Software
- Windows 7, Windows 8, Windows 8.1 – Professional or Enterprise editions, Windows 10
- Microsoft Office 2007, or later, Professional Edition (to include Access)
- Internet Explorer 11 or later; FireFox 3.7 or later (for technical support and transmitting cases electronically: internet, FTP, and email access)
- Email client recommended
- Winzip or equivalent application

  Note: For management of SQL Server, install Microsoft SQL Server Client utilities (with appropriate users and permissions granted on all product databases - CNExT with SQL and CAS)

Revised: January 26, 2016
Cancer Alert System (CAS) Requirements

Below is a listing of the items you will need to host the Cancer Alert System (CAS) automated casefinding system at your facility to send potential cases into CNExT. The Cancer Alert System (CAS) can currently receive HL7 message feeds of BAR, ADT, or ORU messages from multiple departments such as pathology, hospital admit/discharge (BAR preferred), radiation oncology and radiology imaging.

CAS Listener Workstation

- Intel Dual Core (i3, etc.) or Xeon CPU or better, 1.2GHz or better, 1 GB RAM or more *
  * (equivalent processors, such as those from AMD, may also work, but have not been tested)
- 200 mb available hard drive space
- Windows 7, Windows 8, Windows 8.1
- DVD or CD drive (optional installation media)
- Backup hardware and software (recommended daily backups of CAS database)
- Fixed IP address for HL7 router
- Video card and monitor capable of displaying 800 x 600 or better
- Physical location recommended in IT or in the Cancer Registry office

Note: Must be on 24/7 to receive and queue messages. User does not have to be logged on. A dedicated workstation or server is not required and may be virtualized.

CAS MessageQ Database

- Server need not be dedicated to CAS
- 15 GB available hard drive space for database and log files
- SQL Server need not contain the CNExT databases also, but it can
- SQL Server need not be on the CAS Workstation, but it can be
- Backup hardware and software (recommended daily backups of CAS databases)

Note: Must be on 24/7 to record messages. Server may be virtualized. The CAS Workstation must be able to access the SQL Server machine for CAS (MessageQ) database and the SQL Server machine for the CNExT databases (if a different SQL Server).

Revised: May 18, 2017
### 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)