Constructs / Concepts	
A CUCM Server that provides redundancy & load balancing, replicating the database of the primary server, which is treated as authoritative	
Working with a list of primary / secondary / tertiary CUCM servers, what messages does the phone send to each?	
Where does the phone get its list of primary / secondary / tertiary CUCM servers from?	
Buttons along the side of a phone display	
Buttons along bottom of phone display	
How to get to configuration screen for buttons along the bottom of phone display when making a template	
Port used by CUCM	
How and when is the IP phone config file (SEP<mac>.cnf.xml) created and uploaded to the TFTP server	
How does a phone learn the IP addresses & ports of servers to register with?	
What softkey is used to insert a blank? For example, to right justify the buttons	
How many data file & template pairs are needed to import phones for 2 locations with two phone models each, where one of the phone models needs half the phones to have 2 line buttons, and half 3?	
What two end-user fields are required AND don't default	• •

Bandwidth Control

Tag / Grouping to control bandwidth use per call, indirectly selecting the codec	
Grouping to limit bandwidth use in/out of an entire site.	
By default, calls exceeding the bandwidth limits in/out of an entire site (above construct) are dropped. What configuration can be enabled to send them to the PSTN instead?	

Templating Phone Configs

Construct that names an ordered list of CUCM servers (primary / secondary / tertiary) for phone registration, irrespective of location. Optionally, includes an SRST reference	
A named time zone & date format pair that can be assigned to phones	
Name of the Template concept used to apply settings to a group of phones at once, settings include the three constructs above, i.e. • Grouping that controls bandwidth in/out of entire site (middle answer of the "Bandwidth Control" section) • Primary / secondary / tertiary ordering of CUCM servers for phone registration • Time Zone & Date format settings	
New in CUCM v9, Templates used for phone autoregristration that can have variables, like #LastName# that get filled in once a user exists, for things like button labels	• •

Phone Boot & Registration Order

Phone Boot & Registration Order	SCCP	SIP
Phone makes a DHCP request for IP, mask, gateway, TFTP server, …		
Phone downloads any dial rules configured for that phone		
Phone downloads softkey configs & ringtones from TFTP		
Phone learns voice VLAN from CDP		
Phone receives power from PoE or adapter (brick)		
Phone gets the Certificate Trust List via TFTP (secured clusters only)		
Phone registers with primary CUCM server mentioned in its config file (SEP<mac>.cnf.xml)		
Phone loads local firmware image (from within itself)		
CUCM server sends messages to phone with DNs, softkeys, and speed dials		
Phone downloads its own customized config from TFTP in file SEP<mac>.cnf.xml		

Admin Automation

Tool to add/modify/delete large numbers of phones, users, etc. For input, it merges a template and a .csv of specifics	
What are the three components of the above	• • •
Tool for HUGE deployments that combines the above with autoregistration and IVR (interactive voice response).	
How does the tool at the top of this section prepare for the tool directly above	
What role does autoregistration play?	
Similar to above, but integrated within CUCM as of version 10.x. Uses variables like #LastName#	

LDAP

What users are never authenticated via LDAP?	• •
What attribute in an LDAP record must be unique	
What attribute in an LDAP record can't be blank	
Name for the "service" that performs LDAP synchronization	
What kind of CUCM users are listed as inactive "LDAP Sync Status"	
During LDAP synchronization, what happens to CUCM users not found in LDAP?	

LDAP Integration

	Synchronization	Authenticaion
Can create / delete user accounts from LDAP in CUCM?		
CUCM can maintain additional CUCM-only accounts		
Password in CUCM		
Password in LDAP		
Some data only in CUCM		

Underlying Services

Tells the phone which VLAN is used for voice	
Tells the phone the IP address of its TFTP server	
Electrically powers the phone (if not using a brick)	
Provides firmware and phone-specific configuration	
Avoid reliance on because CUCM cannot provide	
Ensures Accurate timestamps for Call Detail Records	

Shortcomings / Limitations with CUCM's DHCP server	• •
How do SCCP phones learn what time it is?	
How do SIP phones learn what time it is?	
Where does phone learn firmware name/version?	

Applying Config   (Beginning with CUCM v8, this choice is made for you)

Completely reboots phone, reloading firmware; good if you've updated the firmware	
How can you cause a phone to completely reboot and reload its firmware, from the phone	• •
Unregisters the phone (so that it will immediately re-register). Quicker because no firmware startup	
What items are not in a phone's TFTP config file, allowing them to be updated simply by causing the phone to re-register.	• •

Associating Names with DNs

The name seen by a **calling** phone during ringing.	
Where set it	
Caller ID that another internal phone (**called** phone) sees when called by this phone line (DN).	
Where set it	
Name shown for a DN line button on user's own phone	
Where set it	
Entry that changes the Calling Line ID (CLID) to a full PSTN number for calls to PSTN	

Notes
LDAP menus questions are in 92_CUCM_Menus and 93_CUCM_Menus_Hierarchy