

lccPoll White Paper Contents

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Description

This document describes configuring the lccPoll program.

lccPoll was developed to supply these capabilities:

- FERPA/Sensitive Information Compliant
- allow staff to create polls
- questions can be 'radio', 'checkbox', 'single line', or 'multiline' responses
- polls can be accessed by network accounts, 'access lists', user ids with or without passwords
- all user information typed (i.e. sensitive information) is encrypted
- not limit on size of typed answers
- downloadable reports for Answers and Access
- shared resources across polls, i.e. page top, footer, etc.
- email submissions and re-take attempts to moderator(s)
- module style design, i.e. styles controlled externally

The program runs according to the provided Logic File.

Installation

Please see the installation document: lccPoll-installation.pdf.

Logic File Settings

All Logic File Keys, including those that are optional

All Logic File Keys have the following format:

[Key Name] [tab] **[Value]**

Example: lcc:key Some Value

Some keys allow for multiple settings, with each setting separated by a [Tab].

Any lines not matching a valid key are considered 'remarks' and will be ignored. A quick way to disable keys is to place an extra [Tab] before the key you want to disable.

All keys can have encrypted values. To specify that a key value is encrypted, prepend the value with "[lcc:encrypted]":

If you supply encrypted keys, you must also provide these keys:

- lcc:globalEncryptionPasswordHash
- lcc:globalEncryptionSaltKey
- lcc:globalEncryptionVIKey

lcc:debugIP (optional)(one per Logic File)

An IP that will function as a debugging session. Extra information is displayed and additional rights are provided.

Example: lcc:debugIP 123.123.123.123

lcc:debugLevel (optional)(zero to many per Logic File)

Specifies what debug information will be provided to the Debug IP. Provide a new line for each level desired.

Example: lcc:debugLevel 1

Example #2 (two levels defined):

 lcc:debugLevel 1

 lcc:debugLevel 3

Debug Levels

- 1 Authentication Attempt
- 2 Form Headers
- 3 Form Posts/Query
- 4 Group Access Security
- 5 SMTP
- 6 Group Access Security Authorized
- 7 Page Displays
- 10 Login Key
- 11 SQL Commands
- 12 SQL Columns
- 13 Encryption
- 14 SQL Connection
- 15 Logic records
- 16 Choice Titles
- 17 Pipe 'log only' records to screen as well
- 18 Resources

19	Poll Access Security
20	User Security Groups
21	Access Files
22	LDAP Key/Values
23	Access File Records
24	DavesBase16
25	SQL Parameters
26	Show Deleted Records
27	Max Length

lcc:fieldMaxLength (*optional*)(zero to many per Logic File)

Controls how large values can be when submitted by the site. It is highly recommended to use the ones listed below.

Example: **lcc:fieldMaxlength lccSAction 30**

Example #2 (two max lengths defined):

lcc:fieldMaxLength lccSAction 30

lcc:fieldMaxLength lccSGroupSelected 10

Max Length Keys

lcc:fieldMaxLength	lccSAccessedOptionsSelect	30
lcc:fieldMaxLength	lccSAction	30
lcc:fieldMaxLength	lccSAnswersOptionsSelect	30
lcc:fieldMaxLength	lccSChoiceSelect	10
lcc:fieldMaxLength	lccSChoiceSelected	10
lcc:fieldMaxLength	lccSChoiceTitle	100
lcc:fieldMaxLength	lccSChoiceValue	100
lcc:fieldMaxLength	lccSChoiceMessage	*
lcc:fieldMaxLength	lccSGroupSelect	10
lcc:fieldMaxLength	lccSGroupSelected	10
lcc:fieldMaxLength	lccSGroupTitle	100
lcc:fieldMaxLength	lccSGroupParent	10
lcc:fieldMaxLength	lccSGroupLevel	30
lcc:fieldMaxLength	lccSLDAPId	200
lcc:fieldMaxLength	lccSLoginKey	300
lcc:fieldMaxLength	lccPollId	10
lcc:fieldMaxLength	lccSPollSelect	10
lcc:fieldMaxLength	lccSPollSelected	10
lcc:fieldMaxLength	lccSPollAccessSelect	10
lcc:fieldMaxLength	lccSPollTitle	100
lcc:fieldMaxLength	lccSPollAccessTitle	100
lcc:fieldMaxLength	lccSPollAccessSource	30
lcc:fieldMaxLength	lccSPollAccessValue1	30
lcc:fieldMaxLength	lccSPollAccessValue2	200
lcc:fieldMaxLength	lccSQuestionSelect	10
lcc:fieldMaxLength	lccSQuestionTitle	100
lcc:fieldMaxLength	lccSQuestionType	30
lcc:fieldMaxLength	lccSQuestionMessage	*
lcc:fieldMaxLength	lccSQuestionSelected	10
lcc:fieldMaxLength	lccSQuestionChoice	100
lcc:fieldMaxLength	lccSQuestionAnswer	*
lcc:fieldMaxLength	lccSResourceTitle	100

lcc:fieldMaxLength	lccSResourceValue	*
lcc:fieldMaxLength	lccSResourceSelect	10
lcc:fieldMaxLength	lccSResourceMasterSelect	10
lcc:fieldMaxLength	lccSResourceSelected	10
lcc:fieldMaxLength	lccSResourceTypeSelect	30
lcc:fieldMaxLength	lccSResourceTypeSelected	30
lcc:fieldMaxLength	lccSResourceUsedSelect	10
lcc:fieldMaxLength	lccSResourceSelected	10
lcc:fieldMaxLength	lccSResourceUsedTitle	100
lcc:fieldMaxLength	lccSTakingPollId	10
lcc:fieldMaxLength	lccSUserPassword	100

lcc:logPath *(optional)(one per Logic File)*

The path/root name of the Log File. The program will place the '.log' extension automatically and will also append a Year/Month date.

Example: **lcc:logPath lccPollLog**

lcc:programName *(optional)(one per Logic File)*

When the program name is displayed, what value to use.

Example: **lcc:programName lccPoll**

lcc:demoMode *(optional)(one per Logic File)*

If supplied and set to 'YES', will force the site into Demo Mode. All change actions will be disabled, except Poll submissions. Poll re-takes will be allowed. Normally, this would be set to 'NO'.

Example: **lcc:demoMode NO**

lcc:pageDataPath *(mandatory)(one per Logic File)*

Where data files are stored. Highly recommend the path be outside of direct access through a URL.

Example: **lcc:pageDataPath F:\lccPollData**

lcc:resourceFilesPath *(mandatory)(one per Logic File)*

Where resource files are stored. Highly recommend the path be outside of direct access through a URL.

Example: **lcc:resourceFilesPath F:\lccPollData\resources**

lcc:questionFilesPath *(mandatory)(one per Logic File)*

Where question files are stored. Highly recommend the path be outside of direct access through a URL.

Example: **lcc:questionFilesPath F:\lccPollData\questions**

lcc:choiceFilesPath *(mandatory)(one per Logic File)*

Where choice files are stored. Highly recommend the path be outside of direct access through a URL.

Example: **lcc:choiceFilesPath F:\lccPollData\choices**

lcc:answerFilesPath *(mandatory)(one per Logic File)*

Where answer files are stored. Highly recommend the path be outside of direct access through a URL.

Example: **lcc:answerFilePath** **F:\lccPollData\answers**

lcc:displayUserId (*optional*)(*one per Logic File*)

If supplied and set to 'YES', will show the logged in user id at the bottom of the page. Normally, this would be set to 'NO'.

Example: **lcc:displayUserId** **NO**

lcc:pageHeadFile (*mandatory*)(*one per Logic File*)

What the filename is of the sitewide page head file. Stored in the 'resources' folder.

Example: **lcc:pageHeadFile** **pageHead.txt**

lcc:pageTopFile (*mandatory*)(*one per Logic File*)

What the filename is of the sitewide page top file. Stored in the 'resources' folder.

Example: **lcc:pageTopFile** **pageTop.txt**

lcc:pageTitle (*optional*)(*one per Logic File*)

A title to provide for a default title on top of pages. This key is currently not used.

Example: **lcc:pageTitle** **lccPoll 2015**

lcc:pollURLRoot (*mandatory*)(*one per Logic File*)

The URL of Polls. This, along with the Poll Id can be advertised as a link to direct viewers to a specific poll.

Example: **lcc:pollURLRoot** **https://ourcollege.edu/lccPoll/?lccPollId=**

lcc:LDAPServer (*mandatory*)(*one to many per Logic File*)

The LDAP (aka AD) server(s) that will authenticate AD accounts.

Example: **lcc:LDAPServer** **dcl.ourcollege.edu/dc=ourcollege,dc=edu**

lcc:maintenancePageTopFile (*mandatory*)(*one per Logic File*)

What the filename is of the maintenance site page head file. Stored in the 'resources' folder. Only shows when not taking a poll.

Example: **lcc:maintenancePageTopFile** **maintenancePageTop.txt**

lcc:pageBottomFile (*optional*)(*one per Logic File*)

What the filename is of the sitewide page bottom file. Stored in the 'resources' folder.

Example: **lcc:pageBottomFile** **pageBottom.txt**

lcc:globalEncryptionPasswordHash (*optional*)(*one per Logic File*)

Hash value supplied for encryption. Must be used with keys 'lcc:globalEncryptionSaltKey' and 'lcc:globalEncryptionVIKey'.

Any set of characters can be used.

Example: **lcc:globalEncryptionPasswordHash** **s0m3C00lPhr@\$e**

lcc:globalEncryptionSaltKey (*optional*)(*one per Logic File*)

Salt Key value supplied for encryption. Must be used with keys 'lcc:globalEncryptionPasswordHash' and 'lcc:globalEncryptionVIKey'.

Any set of characters can be used.

Example: `lcc:globalEncryptionSaltKey` `s0m3C00lPhr@$e`

lcc:globalEncryptionVIKey (*optional*)(*one per Logic File*)

VI Key value supplied for encryption. Must be used with keys 'lcc:globalEncryptionPasswordHash' and 'lcc:globalEncryptionSaltKey'.

Any set of characters can be used, but, must be exactly 16 characters long.

Example: `lcc:globalEncryptionVIKey` `s0m3C00lPhr@$e12`

lcc:securityKey (*mandatory*)(*one per Logic File*)

Support the encryption/decryption processes. Any text is valid.

Example: `lcc:securityKey` `some cool phrase`

lcc:databaseServer (*mandatory*)(*one per Logic File*)

The SQL server providing the database, and the database.

Example: `lcc:databaseServer` `sqlServer.ourcollege.edu` `ourDatabase`

lcc:databaseUserId (*mandatory*)(*one per Logic File*)

The SQL User Id.

Example: `lcc:databaseUserId` `[lcc:encrypted]...`

lcc:databasePassword (*mandatory*)(*one per Logic File*)

The SQL User Password.

Example: `lcc:databasePassword` `[lcc:encrypted]...`

lcc:SMTPServer (*optional*)(*one to many per logic file*)

Email (SMTP) server(s) to send email notifications to.

Example: `lcc:SMTPServer` `emailServer.edu`

lcc:SMTPEmailFrom (*optional*)(*one per logic file*)

From Email Address to use in email messages.

Example: `lcc:SMTPEmailFrom` `jdoe@college.edu`

lcc:SMTPEmailFromName (*optional*)(*one per logic file*)

From Name to use in email messages.

Example: `lcc:SMTPEmailFromName` `John Doe`

lcc:SMTPEmailLinkToSite (*optional*)(*one per logic file*)

Link to include in email messages.

Example: `lcc:SMTPEmailLinkToSite` `http://college.edu/site`

lcc:SMTPEmailTo (*optional*)(*one per logic file*)

To Email Address to use in email messages.

Example: `lcc:SMTPEmailTo` `jdoe@college.edu`

lcc:SMTPEmailToName (*optional*)(*one per logic file*)

To Name to use in email messages.

Example: `lcc:SMTPEmailToName` `John Doe`

lcc:SMTPSubjectPre (optional)(one per logic file)

What to prepend to the Subject in email messages.

Example: **lcc:SMTPSubjectPre** **lccPoll Notification:**

lcc:SMTPMessagePre (optional)(one per logic file)

What to prepend to the Message in email messages.

Example: **lcc:SMTPMessagePre** **lccPoll Notification:**

Creating Encrypted Key Values

To create an encrypted Key Value, use the accompanying lccPollCommandLine tool.

To use the lccPollCommandLine tool, a Logic File will need to be created. Though any filename will work, we suggest the filename:

lccPollCommandLine-logic.txt

This Logic File will follow the same format as the regular one (see Logic File Settings section), except that the only Keys used from the regular Keys are:

- **lcc:globalEncryptionHash**
- **lcc:globalEncryptionSaltKey**
- **lcc:globalEncryptionVIKey**

These keys are defined in the regular Logic File Settings section.

The only other Keys are:

- **lcc:encryptData**
- **lcc:decryptData**

Though both are supported, we recommend using only one of these Keys per run.

lcc:encryptData (optional) (one per Logic File)

This key provides data you want encrypted. After encrypting, the encrypted results will be displayed to the window and copied to your clipboard.

Syntax: **[Key Name]** [tab] [data]

Example: **lcc:encryptData** **some sensitive information**

lcc:decryptData (optional) (one per Logic File)

This key provides data you want decrypted. After decrypting, the decrypted results will be displayed to the window and copied to your clipboard.

Syntax: **[Key Name]** [tab] [data]

Example: **lcc:decryptData** **/39oichY0E/5rMX2uwDjqw==**

Example Logic File

note: extra tabs used to be view friendly in this document

```
lcc:globalEncryptionHash      1234512345  
lcc:globalEncryptionSaltKey  asdfasdf  
lcc:globalEncryptionVIKey    lalalalalalalala  
lcc:encryptData              some sensitive information
```

Syntax for Launch lccPollCommandLine

lccPollCommandLine.exe lcc:logicPath .\lccPollCommandLine-logic.txt

Logic File Example

lcc:debugIP 123.123.123.123

lcc:debugLevel 0
lcc:debugLevel 1 Authentication Attempt
lcc:debugLevel 2 Form Headers
lcc:debugLevel 3 Form Posts/Query
lcc:debugLevel 4 Group Access Security
lcc:debugLevel 5 SMTP
lcc:debugLevel 6 Group Access Security Authorized
lcc:debugLevel 7 Page Displays
lcc:debugLevel 10 Login Key
lcc:debugLevel 11 SQL Commands
lcc:debugLevel 12 SQL Columns
lcc:debugLevel 13 Encryption
lcc:debugLevel 14 SQL Connection
lcc:debugLevel 15 Logic records
lcc:debugLevel 16 Choice Titles
lcc:debugLevel 17 Pipe 'log only' records to screen as well
lcc:debugLevel 18 Resources
lcc:debugLevel 19 Poll Access Security
lcc:debugLevel 20 User Security Groups
lcc:debugLevel 21 Access Files
lcc:debugLevel 22 LDAP Key/Values
lcc:debugLevel 23 Access File Records
lcc:debugLevel 24 DavesBase16
lcc:debugLevel 25 SQL Parameters
lcc:debugLevel 26 Show Deleted Records
lcc:debugLevel 27 Max Length
lcc:debugLevel 28 Auto Authorize Groups For Debug IP

lcc:fieldMaxLength lccSAccessedOptionsSelect 30
lcc:fieldMaxLength lccSAction 30
lcc:fieldMaxLength lccSAnswersOptionsSelect 30
lcc:fieldMaxLength lccSChoiceSelect 10
lcc:fieldMaxLength lccSChoiceSelected 10
lcc:fieldMaxLength lccSChoiceTitle 100
lcc:fieldMaxLength lccSChoiceValue 100
lcc:fieldMaxLength lccSChoiceMessage *
lcc:fieldMaxLength lccSGroupSelect 10

lcc:fieldMaxLength	lccSGroupSelected	10
lcc:fieldMaxLength	lccSGroupTitle	100
lcc:fieldMaxLength	lccSGroupParent	10
lcc:fieldMaxLength	lccSGroupLevel	30
lcc:fieldMaxLength	lccSLDAPId	200
lcc:fieldMaxLength	lccSLogInKey	300
lcc:fieldMaxLength	lccPollId	10
lcc:fieldMaxLength	lccSPollSelect	10
lcc:fieldMaxLength	lccSPollSelected	10
lcc:fieldMaxLength	lccSPollAccessSelect	10
lcc:fieldMaxLength	lccSPollTitle	100
lcc:fieldMaxLength	lccSPollAccessTitle	100
lcc:fieldMaxLength	lccSPollAccessSource	30
lcc:fieldMaxLength	lccSPollAccessValue1	30
lcc:fieldMaxLength	lccSPollAccessValue2	200
lcc:fieldMaxLength	lccSQuestionSelect	10
lcc:fieldMaxLength	lccSQuestionTitle	100
lcc:fieldMaxLength	lccSQuestionType	30
lcc:fieldMaxLength	lccSQuestionMessage	*
lcc:fieldMaxLength	lccSQuestionSelected	10
lcc:fieldMaxLength	lccSQuestionChoice	100
lcc:fieldMaxLength	lccSQuestionAnswer	*
lcc:fieldMaxLength	lccSResourceTitle	10
lcc:fieldMaxLength	lccSResourceValue	*
lcc:fieldMaxLength	lccSResourceSelect	10
lcc:fieldMaxLength	lccSResourceMasterSelect	10
lcc:fieldMaxLength	lccSResourceSelected	10
lcc:fieldMaxLength	lccSResourceTypeSelect	30
lcc:fieldMaxLength	lccSResourceTypeSelected	30
lcc:fieldMaxLength	lccSResourceUsedSelect	10
lcc:fieldMaxLength	lccSResourceUsed	10
lcc:fieldMaxLength	lccSResourceUsedTitle	100
lcc:fieldMaxLength	lccSTakingPollId	10
lcc:fieldMaxLength	lccSUserPassword	100

lcc:programName lccPoll
lcc:demoMode NO

lcc:logPath F:\lccPollLogs\lccPollLog
lcc:pageDataPath F:\lccPollData
lcc:resourceFilesPath F:\lccPollData\resources
lcc:questionFilesPath F:\lccPollData\questions
lcc:choiceFilesPath F:\lccPollData\choices
lcc:answerFilesPath F:\lccPollData\answerFiles

lcc:displayUserId NO

lcc:pageHeadFile pageHead.txt
lcc:pageTopFile pageTop.txt
lcc:maintenancePageTopFile maintenancePageTop.txt
lcc:pageBottomFile pageBottom.txt
lcc:pageTitle lccPoll 2015

lcc:pollURLRoot https://ourcollege.edu/lccPoll/?lccPollId=

lcc:LDAPServer dc1.ourcollege.edu/dc=ourcollege,dc=edu
lcc:LDAPServer dc2.ourcollege.edu/dc=ourcollege,dc=edu

ENCRYPTION

lcc:globalEncryptionHash s0m3C00lPhr@\$e
lcc:globalEncryptionSaltKey s0m3C00lPhr@\$e
lcc:globalEncryptionVIKey s0m3C00lPhr@\$e12

lcc:securityKey some cool phrase

lcc:LDAPUserId [lcc:encrypted]...
lcc:LDAPUserPassword [lcc:encrypted]...

lcc:databaseServer sqlServer.ourcollege.edu lccPoll
lcc:databaseUserId [lcc:encrypted]...
lcc:databaseUserPassword [lcc:encrypted]...

lcc:SMTPServer mail.ourcollege.edu
lcc:SMTPEmailFrom lccpoll@ourcollege.edu
lcc:SMTPEmailFromName lccPoll Notifications
lcc:SMTPEmailTo lccpoll@ourcollege.edu
lcc:SMTPEmailToName lccPoll Mailbox
lcc:SMTPEmailLinkToSite https://ourcollege.edu/lccPoll
lcc:SMTPSubjectPre lccPoll Demo Notification:
lcc:SMTPMessagePre lccPoll Demo Notification:

Definitions

Modifications

NAME	DATE	MODIFICATION
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David Mielcarek	3/27/2015	Created
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