In many projects, customization starts before BMIDE model totally defined. Sometimes, the people does the customization may even have very limited access to the organization who defines BMIDE templates. In those cases, using site preferences in customization can increase configurability and reduce maintenances cost.

**Challenges and Typical Risks**

Using site preferences in customization will allow application administrator to reconfigure the customization when situation changes during the development phases. No codes changes, no recompiling, no redeploying, and no system shutdown needed.

However, too many preferences will increase complexity of the customization. Balancing configurability and complexity should be adjusted accordingly to projects.  
  
**Approach**

Site Preference can be any types TC Preference supported. String and string array can be mostly used ones. To read a string preference

//===================

int getStringPreference(const char\* preferenceName, char\*\* strPref)

{

int iFail = ITK\_ok;

int nIndex = 0;

char\* preVal;

iFail = PREF\_initialize();

if(iFail == ITK\_ok)

{

iFail = PREF\_ask\_char\_value ( preferenceName, nIndex, strPref);

if(iFail != ITK\_ok)

{

TC\_write\_syslog("\nERROR: SITE Preference [%s] does not set\n",preferenceName);

EMH\_store\_error\_s1 (EMH\_severity\_error, EMH\_USER\_error\_base+911, preferenceName);

return EMH\_USER\_error\_base+911;

}

return ITK\_ok;

}

return iFail;

}

String array preference can not only be used for multiple values, but also can be an array of mapping with certain delimiters.

To read an array of mapping:

//=====================================

int parseMaps (const char\* preferenceName, int\* nMap, char\*\*\* strRelNames, char\*\*\* strTypeNames)

{

int iFail = ITK\_ok;

char\*\* strMaps = NULL;

int nList = 0;

int iN = 0;

char\* relName = NULL;

char\* typeName = NULL;

iFail = PREF\_initialize();

if(iFail == ITK\_ok)

{

iFail = PREF\_ask\_char\_values ( preferenceName, &nList, &strMaps);

if(nList<=0)

{

TC\_write\_syslog("\nERROR: SITE Preference [%s] does not set\n",preferenceName);

EMH\_store\_error\_s1 (EMH\_severity\_error, EMH\_USER\_error\_base+911, preferenceName);

return EMH\_USER\_error\_base+911;

}

\*nMap = nList;

\*strRelNames = (char\*\*) malloc(sizeof(char\*)\*(nList));

\*strTypeNames = (char\*\*) malloc(sizeof(char\*)\*(nList));

for( iN = 0 ; iN <nList; iN++)

{

relName = strtok\_s(strMaps[iN], ":", &typeName);

(\*strRelNames)[iN] = (char\*) MEM\_alloc(sizeof(char)\*(tc\_strlen(relName)+1));

tc\_strcpy((\*strRelNames)[iN], relName);

(\*strTypeNames)[iN] = (char\*) MEM\_alloc(sizeof(char)\*(tc\_strlen(typeName)+1));

tc\_strcpy((\*strTypeNames)[iN], typeName);

}

//clean up

}

return iFail;

}

**Value**

Using the site preferences in TC customization makes customization more configurable, extendable.

**Relevant Customer & Project Characteristics**

America General, Denso, Delphi DCS, and Lear are all used site preferences in TC customizations.

**Business Landscape**  
  
**Process**  
  
**IT Landscape**

**Lessons Learned**  
   
**Additional Information**