技術資料番号：SFT-XXXXXX

|  |  |  |
| --- | --- | --- |
| 文書名 | ： | プログラム設計書 |
| 名称 | ： | MPPS |
| 形名 | ： | XA-161 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 改訂番号 | 年　　月　　日 | 承　　認 | 検　　印 | 担　　当 |
| ０ | 2015年04月20日 | FPT-PhuocMT | FPT-ToanDN3 | FPT-HuyTN |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| 承 認 | 検 印 | 担 当 |
| 15.03.16  PhuocMT | 15.03.16  ToanDN3 | 15.03.16  HuyTN |

履 歴

|  |  |  |
| --- | --- | --- |
| 改訂番号 | 内 容 | 作成日、担当 |
| 0 | 初版。 | 2015年04月20日  FPT Truong Ngoc Huy |
|  |  |  |

目 次

1 概要 4

1-1 目的 4

1-2 機能 4

1-3 特記事項 4

2 機能と実現方法 5

2-1 Segment model in preset setting 5

2-1-1 Function 5

2-1-2 Implement method 6

2-2 Stress ASE 2015 7

2-2-1 Function 7

2-2-2 Implement method 10

3 構成 20

3-1 基本構成 20

3-2 詳細構成 20

4 機能概略 21

5 データ定義 22

5-1 Define position of segments 22

5-1-1 Standard schematic (16 segment) 22

5-1-2 Schematic diagram for 16 segment scoring (Horizontal schema dialog) 26

5-1-3 Schematic diagram for 16 segment scoring (Vertical schema dialog) 30

5-1-4 Standard schematic (17 segment) 34

5-1-5 Schematic diagram for 17 segment scoring (Horizontal schema dialog) 38

5-1-6 Schematic diagram for 17 segment scoring (Vertical schema dialog) 42

6 処理詳細 46

6-1 cGetPresetStSegSys 46

6-2 CalcAScore 47

6-3 CalcPIScore 48

6-4 CalcPercentNM 49

6-5 Set\_Atrb\_rfline 50

7 付録 53

# 概要

## 目的

Implement Base Function (5) XA-161.

## 機能

* Implement Segment Stress 17.
* Implement Stress ASE 2015.

## 特記事項

なし

# 機能と実現方法

## Function

### MPPS dialog

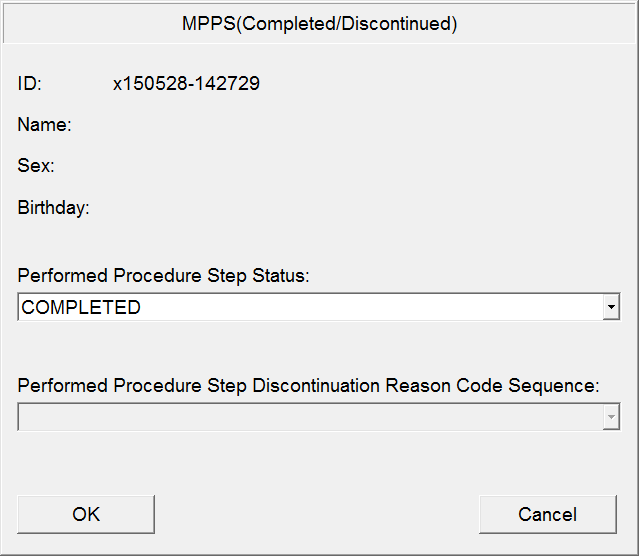


Figure 2-1‑1 MPPS dialog

Table 2-1‑1 Content of MPPS dialog

|  |  |
| --- | --- |
| Item | Giải thích |
| Patient ID | ・Item user không thể rewrite |
| Patient Name | ・item user không thể rewrite |
| Birth Date | ・item user không thể rewrite |
| Sex | ・item user không thể rewrite |
| Performed Procedure Step Status | ・item user không thể rewrite  ・Hiển thị Discontinnued，Completed ở trạng thái Performed Procedure Step. Nếu đang Store thì input COMPLETED như là initial value. Nếu đang chưa Store thì input Discontinured. |
| Performed Procedure Step Discontinuation Reason Code Sequence | ・hiển thị nội dung reason code. |
| OK | ・thực hiên xử lý MPPS, xóa dialog. |
| Cancel | ・Trường hợp đã nhấn New Patient SW, sau khi nhấn Cancel thì sẽ đóng MPPS mà không gửi MPPS, bắt đầu thủ tục kiểm tra. Lúc này, sẽ xóa MPPS dialog mà ko thực hiện xử lý New Patient.  ・Trường hợp tắt điện nguồn mà không xử lý New Patient, MPPS thì khi run New Patient ở lần kế tiếp, sẽ hiển thị MPPS của patient data mà vẫn chưa xử lý  ・[Cancel] sẽ bị MPPS dialog lúc này che đi và chỉ có thể nhấn OK. |

### Quit/Retry dialog

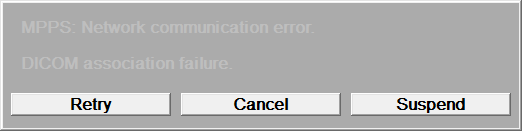


Figure 2-1‑2 Old MPPS error message

Change display to Quit/Retry dialog as below:

## Implement method

### MPPS dialog

* Basicly, MPPS dialog is still working as ARIETTA.
* Because MPPS dialog using EN only, need apply multi language for MPPS dialog. In MultilanguageNB.xls, start define string of Performed Procedure Step Discontinuation Reason Code Sequence in EN and JP as Table 5-1-1.

### Quit/Retry dialog

* Change string of error message and name of button.

|  |  |  |
| --- | --- | --- |
| Item | Old string | New string |
| MPPS error message | "MPPS: Network communication error.  DICOM association failure." | “Acquisition  Cannot connect to server. Quit or retry MPPS.” |
| “Suspend”button | “Suspend” | “Quit” |

* Create new button pattern for mpps error message, using dialog pattern in Table 5-4-3 to create MPPS error message dialog.
* In MPPS Quit/Retry dialog, Retry button is the same with Retry button in old dialog (Figure 2-1-1). Quit button is the samge with Suspend button in old dialog (Figure 2-1-1). Cancel button in old dialog (Figure 2-1-1) will be delete.

# 構成

## 基本構成

なし

## 詳細構成

Table 3-2‑1 Function change

|  |  |  |  |
| --- | --- | --- | --- |
| FILE | Name | Status | Note |
| ..\proper\dialogsrv\item\dlg\_ihe\_mpps.cpp | Cdlg\_ihe\_mpps::OnInitDialog | Modify | ダイアログボックス初期化時の処理. |
| ..\common\message\message\_dialog.c | wrng\_window\_disp | Modify | ワーニングメッセージ(ダイアログ）のボタン種別＆インジケータを設定し、メッセージを表示する. |
| btn\_disp\_position | Modify | Re-position buttons on dialog if dialog has been resized. |
| btn\_disp\_msg | Modify | メッセージのボタンに文字列を表示する. |

# 機能概略

*[Refer to 6. Detail Process]*

# データ定義

## Add string ID of reason code

In MultilanguageNB.xls start define as below.

Table 5-1‑1 Performed Procedure Step Discontinuation Reason Code Sequence

|  |  |  |  |
| --- | --- | --- | --- |
| No. | String ID | EN | JP |
| 1 | STR\_DLG\_IHE\_MPPS\_REASON\_0001 | Doctor cancelled procedure | 医者が検査を中断した |
| 2 | STR\_DLG\_IHE\_MPPS\_REASON\_0002 | Equipment failure | 装置が壊れた |
| 3 | STR\_DLG\_IHE\_MPPS\_REASON\_0003 | Incorrect procedure ordered | 誤った検査が予約されていた |
| 4 | STR\_DLG\_IHE\_MPPS\_REASON\_0004 | Patient allergic to media/contrast | 被検者が造影剤アレルギーである |
| 5 | STR\_DLG\_IHE\_MPPS\_REASON\_0005 | Patient died | 被検者が亡くなった |
| 6 | STR\_DLG\_IHE\_MPPS\_REASON\_0006 | Patient refused to continue procedure | 被検者が検査の継続を拒否した |
| 7 | STR\_DLG\_IHE\_MPPS\_REASON\_0007 | Patient taken for treatment or surgery | 被検者が治療や手術のためいなくなった |
| 8 | STR\_DLG\_IHE\_MPPS\_REASON\_0008 | Patient did not arrive | 被検者が検査に来なかった |
| 9 | STR\_DLG\_IHE\_MPPS\_REASON\_0009 | Patient pregnant | 被検者が妊娠している |
| 10 | STR\_DLG\_IHE\_MPPS\_REASON\_0010 | Change of procedure for correct charging | 診療請求に応じて検査を変更した |
| 11 | STR\_DLG\_IHE\_MPPS\_REASON\_0011 | Duplicate order | オーダーが重複した |
| 12 | STR\_DLG\_IHE\_MPPS\_REASON\_0012 | Nursing unit cancel | 看護部門が検査を取り消した |
| 13 | STR\_DLG\_IHE\_MPPS\_REASON\_0013 | Incorrect side ordered | 追加オーダーが不明確 |
| 14 | STR\_DLG\_IHE\_MPPS\_REASON\_0014 | Discontinued for unspecified reason | 理由なし |
| 15 | STR\_DLG\_IHE\_MPPS\_REASON\_0015 | Incorrect worklist entry selected | エントリーしたワークリストが間違っていた |
| 16 | STR\_DLG\_IHE\_MPPS\_REASON\_0016 | Patient condition prevented continuing | 被検者の体調が悪化した |
| 17 | STR\_DLG\_IHE\_MPPS\_REASON\_0017 | Equipment Change | 装置を代えた |

## Define table string id of reason code

In file dlg\_ihe\_mpps.cpp, define table of reason code as below:

Table 5-2‑1 table lst\_MPPSReasonCodeString

|  |  |
| --- | --- |
| No. | String ID |
| 1 | STR\_DLG\_IHE\_MPPS\_REASON\_0001 |
| 2 | STR\_DLG\_IHE\_MPPS\_REASON\_0002 |
| 3 | STR\_DLG\_IHE\_MPPS\_REASON\_0003 |
| 4 | STR\_DLG\_IHE\_MPPS\_REASON\_0004 |
| 5 | STR\_DLG\_IHE\_MPPS\_REASON\_0005 |
| 6 | STR\_DLG\_IHE\_MPPS\_REASON\_0006 |
| 7 | STR\_DLG\_IHE\_MPPS\_REASON\_0007 |
| 8 | STR\_DLG\_IHE\_MPPS\_REASON\_0008 |
| 9 | STR\_DLG\_IHE\_MPPS\_REASON\_0009 |
| 10 | STR\_DLG\_IHE\_MPPS\_REASON\_0010 |
| 11 | STR\_DLG\_IHE\_MPPS\_REASON\_0011 |
| 12 | STR\_DLG\_IHE\_MPPS\_REASON\_0012 |
| 13 | STR\_DLG\_IHE\_MPPS\_REASON\_0013 |
| 14 | STR\_DLG\_IHE\_MPPS\_REASON\_0014 |
| 15 | STR\_DLG\_IHE\_MPPS\_REASON\_0015 |
| 16 | STR\_DLG\_IHE\_MPPS\_REASON\_0016 |
| 17 | STR\_DLG\_IHE\_MPPS\_REASON\_0017 |
| 18 | 0 |

## Define table string id of MPPS status

In file dlg\_ihe\_mpps.cpp, define table of MPPS status as below:

Table 5-3‑1 table lst\_MPPSStatusString (type dlgSTR\_CODE\_t)

|  |  |  |
| --- | --- | --- |
| No. | Item ID | String ID |
| 1 | MPPS\_STATUS\_COMPLETED | STR\_DLG\_IHE\_MPPS\_STATUS\_COMPLETED |
| 2 | MPPS\_STATUS\_DISCONTINUED | STR\_DLG\_IHE\_MPPS\_STATUS\_DISCONTINUED |
| 3 | 0 | 0 |

## Define new dialog of MPPS error message

In file \common\message\message\_msg.h, start define Quit/Retry type of MPPS error message:

Table 5-4‑1 MPPS Quit/Retry type

|  |  |
| --- | --- |
| Item | Value |
| MSG\_QUITRETRY | 1002 |

In file \common\message\resource.h, start define new id of MPPS error dialog

Table 5-4‑2 ID of MPPS error dialog

|  |  |
| --- | --- |
| Item | Value |
| DLG\_BTN\_QUIT\_RETRY | 1002 |

In file \common\message\WrngDlg.rc, start define new dialog resource as below:

Table 5-4‑3 dialog pattern for MPPS Quit/Retry dialog

|  |  |
| --- | --- |
| Item | Value |
| DLG\_BTN\_QUIT\_RETRY | DIALOGEX 84, 116, 258, 59 |
| STYLE | DS\_SETFONT | DS\_MODALFRAME | WS\_POPUP | WS\_VISIBLE |
| EXSTYLE | WS\_EX\_TOPMOST |
| CLASS | "WrngDlg" |
| FONT | 11, "Arial", 400, 0, 0x0 |
| PUSHBUTTON | "", IDC\_BUTTON1, 90, 41, 80, 11 |
| PUSHBUTTON | "", IDOK, 175, 41, 80, 11 |

In file \common\etc\_sub\word\_msg\_defs.h, start define new string ID of QUIT button

Table 5-4‑4 String ID of Quit button

|  |  |
| --- | --- |
| Item | String |
| STR\_MSG\_BTN\_QUIT | Quit |

# 処理詳細

## Cdlg\_ihe\_mpps::OnInitDialog

|  |  |
| --- | --- |
| 関数名 | Cdlg\_ihe\_mpps::OnInitDialog |
| 機能名 | dialogsrv |
| ﾌｧｲﾙ名 | dlg\_ihe\_mpps.cpp |

機 能

ダイアログボックス初期化時の処理.

呼出形式

BOOL Cdlg\_ihe\_mpps::OnInitDialog()

引 数

　　[入力]

なし

　　[出力]

なし

戻 り 値

なし

処理内容

|  |  |  |  |
| --- | --- | --- | --- |
|  | Comment out add string for status combobox |  | //iIdx = m\_Combo\_Status.AddString( lst\_MPPSString[lst\_StatusTable[i].StrID].pstr\_dt ); |
|  | Get string of COMPLETE status |  | i = 0;  dlgGetStr(lst\_MPPSReasonCodeString[i].StrID, dlgSTR\_MAX, StrBuf); |
|  | Set string of COMPLETE status |  | iIdx = m\_Combo\_Status.AddString(StrBuf); |
|  | Set COMPLETE item index |  | m\_Combo\_Status.SetItemData(iIdx, lst\_MPPSReasonCodeString[i].RssID ); |
|  | Get string of DISCONTINUE status |  | i = 1;  dlgGetStr(lst\_MPPSReasonCodeString[i].StrID, dlgSTR\_MAX, StrBuf); |
|  | Set string of DISCONTINUE status |  | iIdx = m\_Combo\_Status.AddString(StrBuf); |
|  | Set DISCONTINUE item index |  | m\_Combo\_Status.SetItemData(iIdx, lst\_MPPSReasonCodeString[i].RssID ); |
|  | Comment out old code which set string for reason code |  | //for(i = 0; lst\_ReasonTable[i].StrID != 0;  //i++)  //{  //iIdx =  //m\_Combo\_Reason.AddString( lst\_MPPSString[ls  //t\_ReasonTable[i].StrID].pstr\_dt );  //m\_Combo\_Reason.SetItemData( iIdx, i );  //} |
|  | Set string for reason code |  | for(i = 0; lst\_MPPSReasonCodeString [i] != 0; i++)  {  dlgGetStr(lst\_MPPSReasonCodeString[i], dlgSTR\_MAX, StrBuf);  iIdx = m\_Combo\_Reason.AddString(StrBuf);  m\_Combo\_Reason.SetItemData( iIdx, i );  } |

## wrng\_window\_disp

|  |  |
| --- | --- |
| 関数名 | wrng\_window\_disp |
| 機能名 | message |
| ﾌｧｲﾙ名 | message\_dialog.c |

機 能

ワーニングメッセージ(ダイアログ）のボタン種別＆インジケータを設定し、メッセージを表示する.

呼出形式

void wrng\_window\_disp(MSG\_INFO\_t \*msg\_ptr)

引 数

　　[入力]

MSG\_INFO\_t \*msg\_ptr; : メッセージ情報アドレス

　　[出力]

なし

戻 り 値

なし

処理内容

|  |  |  |  |
| --- | --- | --- | --- |
|  | Add case for Quit/Retry type, |  | MSG\_QUITRETRY |
|  | If msg\_find is MSG\_QUITRETRY, set dialog king is DLG\_BTN\_QUIT\_RETRY |  | DLG\_BTN\_QUIT\_RETRY |
|  |  |  |  |

## btn\_disp\_position

|  |  |
| --- | --- |
| 関数名 | btn\_disp\_position |
| 機能名 | message |
| ﾌｧｲﾙ名 | message\_dialog.c |

機 能

Re-position buttons on dialog if dialog has been resized.

呼出形式

void btn\_disp\_position(HWND P\_hWnd)

引 数

　　[入力]

HWND P\_hWnd : Dialog handle

　　[出力]

なし

戻 り 値

なし

処理内容

|  |  |  |  |
| --- | --- | --- | --- |
|  | Add case for Quit/Retry type, |  | case MSG\_QUITRETRY: |
|  | Set number of button |  | TWO\_BUTTON |
|  | Allocate memory for buttons |  | malloc(sizeof(int) \* nNumberOfButton); |
|  | Assign first button is Retry button |  | pButtonID[FIRST\_BUTTON] = IDC\_BUTTON1 |
|  | Assign first button is Retry button |  | pButtonID[SECOND\_BUTTON] = IDOK |
|  | Re-position for 2 button |  | set\_array\_button\_pos |

## btn\_disp\_msg

|  |  |
| --- | --- |
| 関数名 | btn\_disp\_msg |
| 機能名 | message |
| ﾌｧｲﾙ名 | message\_dialog.c |

機 能

メッセージのボタンに文字列を表示する。

呼出形式

void btn\_disp\_msg(HWND P\_hWnd, int disp\_kind, int msg\_kind)

引 数

　　[入力]

HWND P\_hWnd ：ダイアログボックスのウィンドウハンドル

int disp\_kind ：ダイアログ種別

int msg\_kind ：メッセージ種別

　　[出力]

なし

戻 り 値

なし

処理内容

|  |  |  |  |
| --- | --- | --- | --- |
|  | Add case for Quit/Retry type, |  | case MSG\_QUITRETRY: |
|  | Get name of QUIT button. |  | make\_btn\_msg(STR\_MSG\_BTN\_QUIT, str, sizeof(str) / sizeof(str[0])) |
|  | Set name for button |  | SetDlgItemText(P\_hWnd, IDC\_BUTTON1, str) |
|  | Get name of RETRY button. |  | make\_btn\_msg(STR\_MSG\_BTN\_RETRY, str, sizeof(str) / sizeof(str[0])) |
|  | Set name for button |  | SetDlgItemText(P\_hWnd, IDOK, str) |

# 付録

なし