BLUE 3.4 Service Pack 1
Read Me

Document Revision: 02

目次

1 ソフトウェアの説明

このソフトウェアは、PC でヒューマンマシンインタフェース(HMI)のユーザーアプリケーションを開発するための統合開発環境を提供します。開発した HMI ユーザーアプリケーションは、ランタイムソフトウェアによって複数のハードウェアで動作します。

2 動作環境 (画面編集ソフトウェア)

	最小仕様	コメント
PC	Windows PC/AT 互換マシン	-
CPU	第 8 世代 Intel(R) Core™ i3/i5 プロセッサー以上	-
メモリー	8 GB 以上	-
ハードディスクスペース	30 GB 以上	-
OS	Windows 10 Pro (64-bit) 最新更新版	-
オペレーティングシステム以外のプログラム	.NET Framework 4.7.2 full *1	-

*1 画面編集ソフトウェアのインストールの際、.NET Framework Ver.4.7.2 full が自動的にインストールされます。ディスク容量の要件につきましては、Microsoft のウェブサイトをご参照ください。

MEMO：

- 本製品は、アドミニストレーター権限のあるユーザーアカウントでインストールの上、ご使用ください。
- ソフトウェアのインストールファイルには、電子署名が設定されています。インストール中に電子署名に関する問題が発生した場合は、インストールを中止し、カスタマーサポートに問い合わせてください。

3 アクセス権限

3.1 画面編集ソフトウェア

画面編集ソフトウェアのインストールまたはアンインストールは、管理者権限で実行してください。

3.2 ランタイム (IPC シリーズまたは PC/AT 使用時)

ランタイムのインストールまたはアンインストールは、管理者権限で実行してください。

プロジェクトファイルを転送する場合、転送前にランタイムを管理者権限で起動してください。

4 安全なアプリケーションのために

このセクションでは、アプリケーションを安全に設定するためのポイントについて説明します。

MEMO: セキュリティー関連のメッセージはフィードバックゾーンの [セキュリティー警告] タブに表示されます。メッセージを確認し、サイバーセキュリティーのリスクを軽減するための是正措置を実行してください。

4.1 サイバーセキュリティーベストプラクティス

Pro-face 製品を保護し安全性を維持するために、サイバーセキュリティーのベストプラクティスを実践することをお勧めします。

記載の推奨事項を実践していただくことで、お客様のサイバーセキュリティーリスクを減らすことが期待できます。

推奨事項については、以下の URL を参照してください。

https://www.pro-face.com/trans/ja/manual/1087.html

4.2 不正アクセス防止のための安全なネットワークを構築する

● 暗号化された通信を使用した通信環境を構築してください。(例: VPN)

● イーサネット経由で通信を確立してデータを転送する前に、ネットワークの安全性を確認してください。

● イーサネット通信に基づいていない転送オプションを選択します。 (例: USB ケーブルまたはファイルシステム)
イーサネット通信に基づいた転送オプションが必要な場合は、IPsec の使用を推奨します。

- 通信サービスを使用する場合にのみ、データ通信用のポートを開いてください。

- パソコンはファイアウォールで保護し、信頼できる安全なネットワークでご使用ください。

- 表示器は信頼できる安全なネットワークに設置し、ファイアウォールで保護してください。

4.3　表示器上での権限外操作を防止する

- セキュリティー機能を使用してください。

  ➢ 自動ログアウト機能を使用してください。

  ➢ ロックを解除するための適切なセキュリティーレベルを、限定されたユーザーにのみ与えてください (管理者権限を持つユーザーのみにロック解除を許可する等)。

- 以下のオペレーションでは、パスワードが要求されません。

  ➢ 接続機器オペレーションブロック - Upload (USB Storage/SD Card)

  ➢ 接続機器オペレーションブロック - Download (USB Storage/SD Card)

  ➢ ハードウェア設定画面の表示

  上記のオペレーションで使用されるスイッチに、セキュリティーレベルの設定をしてください。

- 表示器への接続に Web Viewer を使用している場合、パスワードを表示させる [***] ボタンは押さないでください。表示させたパスワードは、接続されているすべての表示器および Web Viewer クライアントに表示されます。

4.3.1　**SP5000 シリーズオープンボックス (Windows 10 IoT Enterprise モデル)、IPC シリーズ、PC/AT を使用する場合**

- ランタイムは信頼のできるパソコンでのみ使用してください。

- プロジェクトファイルの転送、またはその他の管理者権限が必要な操作を実行する場合を除き、管理者権限をもつアカウントで Windows にログインしないでください。

- Windows のセキュリティー機能を使用してください (パスワードの設定、自動ログアウト機能の使用など)。

- プロジェクトの管理者アカウントに安全なパスワードとセキュリティーを設定してください。

4.4　情報の改ざんから保護する

- 次のガイドラインを使用し、サイバーセキュリティーのベストプラクティス (ウイルス対策、オペレーティングシステムの更新、強力なパスワードポリシー、アプリケーショ

ン許可リストソフトウェアなど) に従ってパソコンを強化します。
https://www.pro-face.com/trans/ja/manual/1087.html

- ご自身のデータを慎重に管理してください。

- プロジェクトパスワードを追加して、プロジェクトを保護してください。

- USB ケーブルまたはイーサネットケーブルによる転送オプションを使用する場合は、
[転送方法] の [セキュリティー設定] を有効にしてください。

- Windows 管理者権限で画面編集ソフトウェアを実行しないでください。

- 画面編集ソフトウェアは信頼のできるパソコンでのみ使用してください。

5 ライセンス認証

ライセンスの認証方法については、Schneider Electric License Manager のヘルプを参照してください。

6 ツール

以下のツールは、インストールされた¥Tools フォルダーから頒布することができます。

- Export Validation Tool
- User Management Tool

7 新機能および機能改善

7.1 ドライバーの更新

新しい CPU に以下のドライバーで対応しました。

- オムロン株式会社 - CS/CJ/CP/NX シリーズイーサネット

- オムロン株式会社 - CS/CJ/CP シリーズ HOST リンク

以下のドライバーで新しいデバイスアドレスが対応されました。

- 三菱電機株式会社 - Q/QnA シリーズイーサネット

- 三菱電機株式会社 - Q/QnA シリーズシリアル

接続機器のファームウェアバージョン (STEP7 V11-V18) に対応しました。

- Siemens AG - TIA ポータル Ethernet

以下のドライバーが更新され、ユニット ID の範囲が広がりました。

- Modbus Organization - Modbus TCP マスター

- Schneider Electric - Modbus TCP マスター

- Schneider Electric - Modbus TCP マスター (USB 接続)

7.2　新しい機能

アラーム

- [アラームグループ]プロパティウィンドウに[アラーム動作]プロパティが追加されました。[アラーム動作]プロパティが[任意確認]の場合は 3 つの状態、[必須確認]の場合は 4 つの状態でアラームステータスが遷移します。
また、[アラーム動作]プロパティの追加により、エクスポートされるアラームデータのファイルバージョンが 2.1 に変更されました。

配列インデックスをオブジェクトのプロパティ値で間接指定する機能

- 配列インデックスを間接指定する場合、オブジェクトのプロパティ値が使用できるようになりました。

イーサネットまたは USB ケーブル経由での転送時、ログデータの保持/クリアの選択機能

- イーサネットまたは USB ケーブル経由でのプロジェクト転送時、アラーム、ロギング、および操作ログの各設定と各ログデータが保持できるようになりました。ダウンロードマネージャーで各ログデータを保持するかどうか選択します。

改善された機能

- 各レシピグループの最大レシピ数が増えました。

- シンボルファイルを再度インポートする際に、以前にインポートしたシンボルファイルを削除する必要がなくなりました。

8　修正済み制限事項

8.1　作画時の修正済み制限事項

8.1.1　画面編集ソフトウェア

- プロジェクトファイルのエラーを修正したにも関わらず、エラーが表示され続ける問題を改修しました。

- プロジェクトで使用している接続機器の台数が上限に達していないにも関わらず、画面編集ソフトウェア上で"Reached maximum number of *** equipment."のエラーが発生する問題を改修しました。

- 画面編集ソフトウェアの CSV ファイルのインポートに関する問題を改修しました。

- プロジェクトファイルの保存時に、プロジェクトファイルが破損する問題を改修しました。

- 多くの画面/コンテンツを表示するために画面編集ソフトウェアが使用するメモリが大きくなる問題を改善しました。

- 画面編集ソフトウェアが特定の言語設定の場合に、表示器またはシミュレーションで小数値が表示されない問題を改修しました。

- 画面編集ソフトウェアで複数のオブジェクトをドラッグで選択した場合に、正しく動作しない問題を改修しました。

- 画面編集ソフトウェアを特定の解像度のパソコンで使用した場合に「最大化」ボタンが表示されない問題を改修しました。

- 同じソースプロパティの関連付けによって複数のエラーメッセージが発生した場合、エラーウィンドウに 1 つのメッセージだけが表示される問題を改修しました。

- 複数のオブジェクトを同時に選択すると、積み重ねを変更するための[順序]が選択できなくなる問題を改修しました。

- 画面編集ソフトウェアで[保存先]プロパティから USB ストレージを選択し、[外部ストレージ]オペレーションで SD カードを選択しているにも関わらず、不正なエラーメッセージ「[保存先]に設定されたストレージが、[外部ストレージ - 取り出しオペレーション]にも設定されているため、[保存先]の設定は無効です。」が表示される問題を改修しました。[保存先]プロパティが SD カード、[外部ストレージ]オペレーションが USB ストレージの場合も同様です。

- 複数のオブジェクトで、[画像ファイル]に指定されたパスが同じでも表示される画像が異なる場合、古いバージョンのプロジェクトファイルを開くと、正しい画像が取得できない問題を改修しました。

- Windows のログインユーザ名が非常に長い場合、画面編集ソフトウェアが正しく動作しない問題を改修しました。

- 画面編集ソフトウェアで過去バージョンのプロジェクトファイルを開いた場合に、プロジェクトファイルが破損する、または画面編集ソフトウェアが強制終了する問題を改修しました。

8.1.2 画面 / コンテンツ

- 画面編集ソフトウェアで[グリッドの表示]を有効にし、スクロールキャンバスやズームキャンバスなどの幅・高さが変更可能なレイアウトオブジェクトの大きさを広げた場合に、グリッドが正しく表示されない問題を改修しました。

- 画面編集ソフトウェアで、ナビゲーション機能で使用されるナビゲーションスイッチのプロパティが不正にバインドできる問題を改修しました。

- 画面またはコンテンツを画面編集ソフトウェアバージョン 3.3 からバージョン 3.2、3.2 Service Pack 1、3.2 Service Pack 2 にコピーした場合に、予期しない動作が発生する場合がある問題を改修しました。

- 画面編集ソフトウェアで、コンテンツの幅および高さに大きな値を設定し、拡大率を変更した場合、正しくスクロールできない問題を改修しました。

- 画面編集ソフトウェアで、ナビゲーションスイッチの[塗り込み]や[枠線]などのプロパティの値が保持されない問題を改修しました。

- 画面編集ソフトウェアで、ナビゲーションスイッチの[アイコンを表示]プロパティを変更しても、正しく動作しない問題を改修しました。

8.1.3 部品 / 図形

- [Ctrl]キーとマウスを使用して部品や図形をコピーした場合、意図せず同じ位置に部品や図形が複製される問題を改修しました。

- オブジェクトのタッチ操作（プロパティウィンドウの[機能]タブ→[タッチ]タブ）で文字列を設定する場合、[ソース]に定数で大きな数値を設定すると設定先に正しい文字列が設定されない問題を改修しました。

- 画面編集ソフトウェアで、部品または図形のプロパティに間接アドレス指定を含むバインディングソースを設定した場合、不要なエラーが表示される問題を改修しました。

8.1.3.1 ドロップダウンリスト

- ドロップダウンリストの[項目]が 100 個までしか設定できない問題を改修しました。256 個まで設定できます。

8.1.3.2 配管

- 配管の先端で[ポイントの追加]を行うと、追加された先端が予期しない領域に描画され選択できなくなる問題を改修しました。また、[オブジェクトをスナップ]オプションを使用し配管を編集すると、画面編集ソフトウェアが突然終了する問題を改修しました。

- ツールチェストで配管を選択し、作画画面をクリックしても描画が開始できない問題を改修しました。

8.1.4 スクリプト

- [データロギング]の値ブロックに[TriggerVariable]プロパティが不正に表示される問題を改修しました。

- スクリプトで使用されている変数を削除した後、別の変数を削除された変数と同じ名前に変更しても、エラーと変数ブロック内の Undefined が解決されない問題を改修しました。

- スクリプトで[機器]値ブロックの設定値が空白のままの場合、画面編集ソフトウェアが突然終了する問題を改修しました。

- 変数がブロックモードのスクリプトで使用されていないにも関わらず、画面編集ソフトウェアで変数のエラーが表示される問題を改修しました。

- 以下の文字を含む文字列をリテラルとして使用すると、スクリプト編集画面のテキストモードで構文エラーが表示される問題を改修しました。

  - /u

  - /x

- 変数名に以下の言語の文字が含まれる場合、スクリプト編集画面のテキストモードで変数名を入力しても入力補助機能が動作しない問題を改修しました。

  - 日本語

  - 韓国語

  - 中国語

- スクリプト編集画面のテキストモードで構造体の配列変数に関連付けたアラームプロパティ（例えば Var1.WORD1.HiHi.Message）を使用している場合、変数のアラームの種類を例えば HiHi から LoLo に変更してもスクリプト内のアラームプロパティが更新されない問題を改修しました。

- テキストモードのスクリプトで下表のキーワードに一致する名前の変数を使用する場合は、接頭辞である"$Global"を付けてください。例:'$Global.with'

キーワード				
break	const	continue	debugger	default
delete	do	export	extends	finally
for	function	goto	import	instanceof
return	super	switch	throw	try
var	while	with		

- スクリプト編集画面のテキストモードで IME を使用する場合、IME での入力が正しく動作しない問題を改修しました。

- スクリプト編集画面のテキストモードで置換を連続して実行すると、正しく置換が行われない問題を改修しました。

- 代入式(=)で$Math.E()または$Math.Random()を使用したスクリプトが動作しない問題を改修しました。

- スクリプトで使用されている[表示器]値ブロックのプロパティ名が不完全な場合に、そのまま転送できる問題を改修しました。不完全な設定に対してエラーが表示され、転送が中断されます。

- 画面編集ソフトウェアで配列を含むスクリプトの要素に対して貼り付け/元に戻す/やり直すの操作を行った場合、ランタイムでスクリプトが正しく動作しない問題を改修しました

- [SystemErrorGroup]はプロパティに対応していないにも関わらず、プロパティが選択できていた問題を改修しました。

- 画面編集ソフトウェアのスクリプト編集画面でマウスホイールによるスクロールが動作しない問題を改修しました。

- 画面編集ソフトウェアで[スクリプトモード]に[テキスト]を設定している場合、スクリプト編集画面のセクションの間に不要な領域が含まれる問題を改修しました。

- 画面編集ソフトウェアで[レシピ]値ブロックに不完全なパスが含まれる場合に、強制終了する問題を改修しました。

- 画面編集ソフトウェアでテキストモードのスクリプトに破損データが含まれる過去バージョンのプロジェクトファイルを開いた場合、不正なダイアログボックスが表示される問題を改修しました。

8.1.5　アラーム

- 同じ変数のアラームの値に、整数部分が同じ値の異なる実数値を使用できない問題を改修しました。

- アラームに設定されている変数が不正な場合でも、そのまま転送できる問題を改修しました。不正な変数に対してエラーが表示され、転送が中断されます。

8.1.6　ロギング

- エクスポートしたロギングデータの日付と時刻のフォーマットが設定できない問題を改修しました。

- ロギンググループプロパティの[インターロック]プロパティが ON になっても、表示器がロギングデータの収集を継続する問題を改修しました。

8.1.7　コンバーター

- 範囲コンバータで、[データの種類 (出力)]に[言語テーブル]を選択した場合、文字ではなく文字列 ID が出力される問題を改修しました。

8.1.8　変数

- デバイスアドレス入力画面の操作性を改善しました。

- DATE_AND_TIME 型の変数に、表示器の DateAndTime ソースプロパティを代入すると警告が表示される問題を改修しました。

- デバイスアドレスと関連付けた外部変数の[入力範囲]、[最小]、および[最大]の設定が、プロジェクトファイルを開いた場合に初期化される問題を改修しました。

- 配列の編集画面で、検索機能で配列を絞り込んでいる状態で次元の設定値を変更すると、正常に変更されない問題を改修しました。

- 配列要素内の構造体を編集すると画面編集ソフトウェアが突然終了する問題を改修しました。

- シンボルファイルからインポートした配列変数の[次元]の設定が変更できた問題を改修しました。[次元]の設定は変更できません。

- 変数のデータタイプを変更すると、変数とデバイスアドレスのデータタイプが一致していないにも関わらず、画面編集ソフトウェアでエラーが表示されない問題を改修しました。

- インポートする CSV ファイルとインポート先のプロジェクトに同じ名前のフォルダーが存在した場合に、そのフォルダを異なるフォルダと認識してフォルダー数の上限に関するエラーを表示していた問題を改修しました。

- 画面編集ソフトウェアで構造体の子要素の名前を変更すると、異なる構造体で同じ名前の子要素も名前が変更される問題を改修しました。

- デバイスアドレスに関連付けした外部変数をインポートしても、[データ共有]プロパティが変更されない問題を改修しました。

- 変数セレクタダイアログボックス内の検索機能で、構造体内部の変数が正しく検索できない問題を改修しました。

- 構造体配列または配列の要素に変数をバインドした場合、ランタイムで正しく値を表示できない問題を改修しました。

- 画面編集ソフトウェアで、マイナス値、またはゼロ以外の要素番号から始まる配列 (例: Array1[-1..1]、Array2[4..6]) を含む古いバージョンのプロジェクトを開いて転送した場合、ランタイムで正しく動作しない問題を改修しました。

- 画面編集ソフトウェアで各項目の間に連続する複数のタブが含まれる CSV/TXT ファイルをインポートした場合、正しくインポートできない問題を改修しました。

- 画面編集ソフトウェアで、ポルトガル語、フランス語、スペイン語、イタリア語またはドイツ語を使用している場合、REAL または LREAL 型の変数の小数点区切り文字が、プロパティ画面上と変数編集画面上で異なる問題を改修しました。

- 画面編集ソフトウェアの言語設定が以下に示すいずれかの場合、REAL および LREAL の変数の初期値が変更される問題を改修しました。

  - ポルトガル語

  - フランス語

  - スペイン語

  - イタリア語

  - ドイツ語

- 配列の間接アドレス指定を使用すると範囲が正しく判定されない問題を改修しました。

8.1.8.1 シンボルリンク

- 2 つ以上のシンボルリンクを使用すると、表示器が正しく動作しない問題を改修しました。

- 画面編集ソフトウェアで、シンボルリンク機能でインポートした変数の[保持]プロパティが設定できる状態になっていた問題を改修しました。

- シンボルリンク機能でシンボルファイルをインポート中に、エラーが正しく表示されない問題を改修しました。

- 画面編集ソフトウェアでプロジェクトファイルに含まれるシンボルリンク機能でインポートした変数を削除した後に、変更を加えたシンボルファイルをインポートした場合、必要なエラーが発生しない問題を改修しました。

- 画面編集ソフトウェアで、EcoStruxure Control Expert のシンボルファイルをインポートすると、非 IEC フォーマットのアドレスがインポートされますが、アドレス部分が空欄のためにエラーが発生する問題を改修しました。

- 画面編集ソフトウェアで複雑な構造体のタグを含むシンボルファイルをインポートした場合に、デバイスアドレスが不正なアドレスに設定される問題を改修しました。

- 画面編集ソフトウェアでシンボルファイルをインポートした場合に、外部変数ではなく内部変数に割り当てられる問題を改修しました。

- インポートしたシンボルファイルから作成した変数を、別のシンボルファイルをインポートする前に削除した場合に、変数データベースが破損する問題を改修しました。

- 画面編集ソフトウェアでテキストモードのスクリプトを使用している場合、インポートしたシンボルファイルを削除し、再度インポートすると不要なエラーが表示される問題を改修しました。

8.1.9 シミュレーション

- プロパティウィンドウで小数点にカンマを使用した値を設定すると、シミュレーションが起動しない問題を改修しました。

- 一部のプロパティで小数点の値を使用した場合に、シミュレーションが突然終了する問題を改修しました。

8.1.10 ドライバー

- 以下のドライバーで、接続機器のプロパティ画面から[シリーズ]を変更した場合に表示されるエラーメッセージの内容を改善しました。

  ➤ Siemens AG - SIMATIC S7 MPI 直結

  ➤ Siemens AG - SIMATIC S7 イーサネット

- 以下のドライバーで、不正なユニット ID を設定したプロジェクトが転送できていた問題を改修しました。

  ➤ Modbus Organization

    ✧ Modbus SIO マスター

    ✧ Modbus SIO ASCII マスター

- ✧ Modbus TCP マスター

- ➢ Schneider Electric

  - ✧ Modbus SIO マスター

  - ✧ Modbus TCP マスター

  - ✧ Modbus TCP マスター(USB 接続)

- ➢ Emerson Industrial Automation / Control Techniques

  - ✧ Modbus SIO マスター

  - ✧ Modbus TCP マスター

- ➢ 横河電機株式会社

  - ✧ Modbus SIO マスター

  - ✧ Modbus TCP マスター

8.1.11 外部ストレージ

- ● アラーム、ロギング、操作ログの[保存先]プロパティに外部ストレージを選択したプロジェクトを、外部ストレージが接続されていない表示器に転送できていた問題を改修しました。

8.2 転送時の修正済み制限事項

- ● ファイルサイズの上限値を超えたプロジェクトファイルを転送しようとした場合に、画面編集ソフトウェアがエラーを表示しない問題を改修しました。

- ● GP-Pro EX のプロジェクトファイルが動作している表示器に、[イーサネット設定の転送]が有効になっているプロジェクトファイルを BLUE から転送をする場合、転送が正常に終了した場合も画面編集ソフトウェア上で転送エラーが表示された問題を改修しました。

- ● 大きいサイズのプロジェクトファイルを転送した場合に、転送完了後、表示器が起動しない問題を改修しました。

- ● セキュリティ機能を使用してプロジェクトファイルを転送すると、画面編集ソフトウェアで保存するかどうかを確認するダイアログボックスが表示されない問題を改修しました。

8.2.1 ST6000 シリーズ、STM6000 シリーズ

- ● ローカルストレージを保持するか削除するかの確認ダイアログボックスで[キャンセル]ボタンが動作しない問題を改修しました。

8.3　表示器使用時の修正済み制限事項

8.3.1　画面 / コンテンツ

● 画面編集ソフトウェアの[Target01]プロパティウィンドウで、イーサネット設定が無効のまま[イーサネット設定の転送]チェックボックスのチェックを外すと、[初期画面 ID]プロパティが設定どおりに動作しない問題を改修しました。

● ズームキャンバスを使用した画面およびコンテンツを大きな倍率で表示している場合に、表示器およびシミュレーションで正しくスクロールできない問題を改修しました。

8.3.2　部品 / 図形

● 以下の部品で[影]プロパティを使用すると、Web Viewer クライアントが正しく表示されない問題を改修しました。

> ➢ ランプ

> ➢ マルチステートランプ

> ➢ 切り替えスイッチ

> ➢ チェックボックス

> ➢ ラジオボタン

● オブジェクトの幅および高さが 600 以下の場合でも、表示器およびシミュレーションで影が表示されない問題を改修しました。

8.3.2.1　文字列表示器

● 文字列表示器に言語テーブルの文字列を出力する範囲コンバーターを設定した変数をバインドすると設定した文字列が表示されずに ID が表示される問題を改修しました。

8.3.2.2　トレンドグラフ

● トレンドグラフで過去データを表示した場合、最新のデータが表示される問題を改修しました。

● トレンドグラフで過去データを表示する際、表示がちらつく問題を改修しました。

8.3.2.3　画像表示器

● 画像表示器の幅をオブジェクトを選択した時に表示されるコントロールアイコン（矢印や拡大、縮小）の幅よりも小さくすると、画像表示器の範囲外にも関わらずタッチできない問題を改修しました。

8.3.2.4　切り替えスイッチ

● [切り替えスイッチ]をフラットテーマで使用した場合に、[塗り込み]および[枠線]プロパティを[なし]に設定すると、白い円が表示される問題を改修しました。

8.3.2.5 数値表示器

● コンバータを使用して変数を数値表示器にバインディングした場合、最小値と最大値がキーパッド上で正しく表示されない問題を改修しました。

8.3.2.6 ドロップダウンリスト

● [ドロップダウンリスト]の[項目]、[選択番号](または[選択値])プロパティに他のプロパティをバインディングした場合、バインディングソースプロパティの値に従って動作しない問題を改修しました。

8.3.2.7 ブロックトレンド

● ブロックトレンドオブジェクトで、多くの変数のデータを表示し[ブロックトレンド]オペレーションの[Clear and Draw]を実行すると、正しく表示されない問題を改修しました。

8.3.3 スクリプト

● スクリプトで、変数の Quality プロパティを使用した場合に正しく動作しない問題を改修しました。

● スクリプトで 64 ビット長の変数を比較演算ブロックで使用した場合に正しく動作しない問題を改修しました。

8.3.4 トリガー / オペレーション

● Var1[Var2.Value].Value のような間接アドレスを指定した変数を[デバッグ表示]オペレーションで使用した場合に、正しく表示されない問題を改修しました。

● 複数のパラメーターが指定できるように、[アプリケーションの起動]オペレーションを改修しました。

8.3.5 アラーム

● アラームメッセージで[言語文字列 ID]を関連付けると、アラーム表示器部品のフィルタ機能が正常に動作しない問題を改修しました。

● [アラームモード]が[ヒストリカル]のアラーム表示器で選択したアラームに対して、[アラーム表示器]オペレーションの[Delete]を実行した場合、[CurrentLogCount]プロパティが正しく更新されない問題を改修しました。

● [アラームグループ]のラベルに言語テーブルの文字列を使用した場合、[アラームモード]が[ヒストリカル]のアラーム表示器でラベルが正く表示されない問題を改修しました。

● [すべてのアラーム]の[保存先]プロパティに外部ストレージを設定し、その後外部ストレージからアラームデータを削除した場合、表示器が正しく起動されない問題を改修しました。

● 操作ログのエクスポートを実行中に表示器の電源を落とした場合、次回の電源投入後、操作ログのエクスポートと[遅延]オペレーションが正しく動作しない問題を改修しました。

8.3.6 ロギング

- SQL の予約語が、ロギンググループ名として使用できない問題を改修しました。

- ロギンググループの下記設定、エクスポート実行時に表示している画面の構成、および使用している表示器の組み合わせによって、ロギングデータのエクスポートに時間がかかっていた問題を改善しました。

  ➢ 最大レコード数

  ➢ 登録している変数の数

  ➢ エクスポート先のデータストレージ

- 多くのデータがロギングされている状態で、表示器の起動時間が遅くなる問題を改修しました。

8.3.7 レシピ

- ランタイムで複数のレシピファミリーまたは複数のグループを設定している場合、ランタイムでレシピデータを編集すると、意図しない箇所のレシピデータが変更される問題を改修しました。

- レシピデータの[最小入力]、[最大入力]を画面編集ソフトウェアで設定している場合、表示器上でレシピデータの値を変更する時に[最小入力]、[最大入力]の値が表示されない問題を改修しました。[レシピデータ表示器]の[最小/最大値を表示]プロパティを選択することで、[レシピデータ表示器]に最小値および最大値が表示されます。

8.3.8 セキュリティ

- ユーザー名やパスワードの入力に失敗してアラーム表示器にエラーメッセージが表示された場合、正しくログインできた後もエラーメッセージが表示される問題を改修しました。

- 自動ログアウト時に画面を切り替える機能を使用している場合、画面切り替え後にグラフィックオブジェクトが正しく表示できない問題を改修しました。

8.3.9 インポート

- 改行を含む CSV ファイルをインポートすると、インポートが中断され、CSV データの一部のみインポートされる問題を改修しました。
  改行を含む CSV データは空データとしてインポートされ、その後の処理が継続されます。

8.3.10 Web Viewer

- Web Viewer サーバーへのログインが 2 回目以降の場合、Web Viewer クライアントをバックグラウンドに移動すると、[タッチアンドホールドのタイムアウト]プロパティが設定どおりに動作しない問題を改修しました。

- 以下の条件のいずれかに一致するグラフィックオブジェクトを使用する場合、表示器と Web Viewer の画面表示に違いが生じる問題を改修しました。

    - オブジェクトに'Animation.RotationAngle'および'Animation.Rotation Center(X)/(Y)'が設定されており、かつグループ化されている。

    - オブジェクトに'Animation.RotationAngle'および'Animation.Rotation Center(X)/(Y)'が設定されており、かつ幅や高さに変数などが関連付けられている。

- 配管オブジェクトで、[影]を有効にし、完全に水平または垂直な形状で使用した場合、iOS および iPadOS を除く OS 上の Web Viewer で正しく表示されない問題を改修しました。（なお、iOS および iPadOS 上の Web Viewer では正しく表示されない場合があります。）

8.3.11 OPC UA サーバー

- 構造体や配列変数の Node ID で、構造体や配列変数の名前が重複していた問題を改修しました。

8.3.12 ドライバー

- Schneider Electric の Modbus TCP マスタードライバーで BOOL 型の Unlocated 変数を使用している場合、ランタイムが予期しない領域に対して読み込みを行い、その結果予期しない動作が発生する問題を改修しました。

- 三菱電機株式会社の FX シリーズ CPU 直結ドライバーで FX3UCCPU を使用している場合、ランタイムが正しく通信できない問題を改修しました。

- 以下のドライバーで、接続機器との接続が復旧しない問題を改修しました。

    - Schneider Electric

        - Modbus SIO マスター

        - Modbus TCP マスター

- 以下のドライバーでユニット ID の入力可能な範囲を改修しました。

    - Modbus Organization

        - Modbus TCP マスター

    - Schneider Electric

        - Modbus SIO マスター

        - Modbus TCP マスター(USB 接続)

- Pro-face by Schneider Electric のメモリリンクイーサネットを使用時に書き込みコマンドが特定のワード長の場合、正しく動作しない問題を改修しました。

- Schneider Electric の Machine Expert Network でファンクションブロックの変数を使用時に、表示器が正しく接続機器と通信できない問題を改修しました。

8.3.13 SP5000 シリーズ

- ボックスモジュール SP-5B412 のランタイムをアンインストールし、再インストールすると、ランタイムが正しく起動しない問題を改修しました。

8.3.14 GP-4100 シリーズ

- ハードウェア設定画面の[Date/Time]に表示される「年」が上下ボタンで変更できない問題を改修しました。

- 三菱電気株式会社 FX シリーズ CPU 直結を RS422/485(4wire)で使用すると、正しく通信しない問題を改修しました。

8.3.15 ST6000 シリーズ

- システムエラーSYS02002 が表示された場合、バッテリー交換後に表示器を再起動してもシステムエラーが表示される問題を改修しました。

8.3.16 IPC シリーズ、PC/AT

- Windows の OS 言語が、一般ユーザーのグループ名が Users ではない環境（例：フランス語 OS）でランタイムが正しく動作しない問題を改修しました。

8.4　パフォーマンスの改善

- 画面編集ソフトウェアがプロジェクトファイルを転送する際のパフォーマンスを改善しました。

- 画面編集ソフトウェアがプロジェクトファイルを開く際のパフォーマンスを改善しました。

- 画面編集ソフトウェアがシミュレーションを実行する際のパフォーマンスを改善しました。

- 画面編集ソフトウェアが多数のオブジェクトやコンテンツ表示器を含む画面またはコンテンツを表示する際のパフォーマンスを改善しました。

- 多数のアラームを登録したプロジェクトが転送されている表示器を起動する際のパフォーマンスを改善しました。

- ブロックトレンドまたはトレンドグラフで、多くの点を表示した場合のパフォーマンスを改善しました。

8.5　サイバーセキュリティー

- エクスポートされたファイル（.csv、.txt）にスクリプトが含まれる場合、スクリプトが実行されないようにセキュリティーが強化されました。

- このリリースでは、次のセキュリティーの脆弱性を改修しました。

> ➢ CVE-2023-1049

9 制限事項

この章では、 画面編集ソフトウェア、ランタイムにおける制限事項を説明しています。

9.1 ライセンスの制限事項

- Schneider Electric License Manager でバージョン 3.0 のトライアルライセンスが有効な場合は、削除してください。

- トライアルライセンスの有効期限が切れたライタイムを起動した場合、Schneider Electric License Manager が起動し、ライセンスの入力を求められます。ライタイムを操作する前に Schneider Electric License Manager を閉じると、ライタイムを継続して操作できます。

9.2 作画時の制限事項

9.2.1 画面編集ソフトウェア

- 配列変数要素の変数を完全な変数名で検索することはできません。 配列変数名または要素の変数名で検索します。
  たとえば、検索対象が「Var1 [Var2.Value] .Value」の場合、「Var1.Value」（配列変数名）または「Var2.Value」（要素で使用される変数名）で検索します。 「Var1 [Var2.Value] .Value」で検索することはできません。

- 画面編集ソフトウェアのインストール先に Unicode 文字を含むパスを指定しないでください。インストールできません。Unicode 文字を含まないパスを指定してください。

- 画面編集ソフトウェアで、プロジェクトファイルを閉じた後に再度開いた場合、タブの状態が変わることがあります。

  - ➢ ひとつのドッキング領域に複数のタブがある場合、その順序が保持されません。

  - ➢ レイアウト要素（参照項目など）を閉じた後に再度プロジェクトを開くと、そのレイアウト要素が開いた状態になります。

- Windows 8.1 および Windows Server 2012 R2 は、画面編集ソフトウェアに対応していない OS です。画面編集ソフトウェアをインストールすることは可能ですが、正常に起動することはできません。

- 画面編集ソフトウェアで、ナビゲーションスイッチのプロパティにエラーがある場合、エラーウィンドウに表示されたメッセージからエラー箇所に移動することができない場合があります。エラーウィンドウで[ソース]、[パス]、[プロパティ]の内容を確認し、手動でエラー箇所に移動してください。

- 画面編集ソフトウェアで、スクリプトにエラーがあった場合、エラーウィンドウに表示されるエラーの数がブロックモードとテキストモードで異なる場合があります。

9.2.2 プロジェクトファイル変換

- 過去のバージョンのプロジェクトファイルを変換すると、マルチステートランプオブジェクトの[変数]プロパティに関連する誤ったエラーが表示されます。エラーをダブルクリックすると、エラーは表示されなくなります。

- 本バージョンで下記プロジェクトファイルを開く前に、リンク先を参照ください。マニュアルのトップページから[機能ガイド]のアイコンをクリックし、表示されたマニュアルの目次から[ご使用の前に] – [プロジェクトファイル変換の注意点]の順に選択します。

  https://www.pro-face.com/manual/blue/history/ja-JP/index.htm

9.2.3 画面 / コンテンツ

- [画面の種類]で[ビューボックス]を選択した画面を追加した場合で、以下の条件に該当すると、表示器上で画面が正しく描画されない場合があります。

  - スクリプトで、以下のいずれかを実行している

    - 表示器のソースプロパティ(<表示器名>.Preferences.LanguageID)を使用して言語切替を実行

    - [セキュリティ]オペレーションの[ログイン]を実行

    - コンテンツ表示器のソースプロパティ(<オブジェクト名>.Visibility)を使用して可視状態を変更

  - 上記を実行したあと、画面切替またはコンテンツ切替を実行している

9.2.4 部品 / 図形

- 以下の図形で頂点の編集や角度の変更を行う場合、[オブジェクトをスナップ]オプションを使用しても編集点はスナップしません。

  - 円弧

  - アーチ

  - 連続曲線

  - ドーナツ

  - 直線

  - パス

  - 扇形

  - 連続直線

  - 多角形

9.2.4.1 コンテンツ表示器

● コンテンツ表示器および参照先コンテンツの幅・高さの値を、他のプロパティやスクリプトから参照しても、値が正しく取得できない場合があります。

9.2.4.2 ユニフォームグリッド

● ユニフォームグリッドで、[可視]プロパティを[非表示]または[縮小]に設定したグラフィックオブジェクトを表示している場合、オブジェクトが正しく表示されない場合があります。画面またはコンテンツを閉じ、再度表示してください。

9.2.4.3 レイアウトオブジェクト

● レイアウトオブジェクトを入れ子で使用している場合、親レイアウトオブジェクト内のグラフィックオブジェクトを[可視]プロパティで[縮小]に設定しても、子レイアウトオブジェクトのサイズが正しく調整されない場合があります。画面またはコンテンツを閉じてから再度表示してください。

9.2.4.4 ブロックトレンド

● ブロックトレンドの特定のプロパティで、エラーメッセージ「データの種類が不一致。有効なデータ種類を指定してください。」が、誤って表示される場合があります。[表示範囲設定を使用]プロパティのチェックをはずしてエラーを消してから再度チェックを入れてください。

9.2.4.5 画像表示器

● 画像表示器で画像ファイルが保存された正しいパスを指定しているにも関わらず、シミュレーションで「Images not found. There are no files with .png in the specified folder.」と表示される場合があります。指定するパスやファイル名の長さを短くして再度プロパティを設定してください。

9.2.5 フォント

● フォントの種類に含まれる、Chinese_Simplified_GB2312_Gothic は将来のバージョンにて使用できなくなる予定です。
このフォントを使用した古いバージョンのプロジェクトファイルを本バージョンで開くと、Chinese_Simplified_GB18030_Gothic に変換されます。

9.2.6 スクリプト

● スクリプト編集画面のテキストモードで検索と置換を使用する場合、特殊文字（'$'、'^'、'*'など）を含む検索が正しく動作しないことがあります。

● スクリプト編集画面がテキストモードの場合、[参照項目]ウィンドウからテキストモードのスクリプトを置換することはできません。スクリプト編集画面の検索と置換を使用してください。

9.2.7 トリガー / オペレーション

- スクリプト上で、動作対象外のオブジェクトをタッチトリガーに指定しても、画面編集ソフトウェア上でエラーになりません。

  - ➢ アラーム表示器

  - ➢ ハードウェア設定

  - ➢ レシピデータ表示器

  - ➢ 画像表示器

  - ➢ ウェブブラウザー

  - ➢ 全てのレイアウトオブジェクト

  - ➢ 画面 / コンテンツ

  - ➢ グループオブジェクト

9.2.8 アラーム

- スクリプトでアラームメッセージを変更できません。画面編集ソフトウェアでアラームメッセージを変更するスクリプトを作成するとエラーが発生します。

9.2.9 変数

- "Structure"という名前の変数を含む変数ファイルをインポートしないでください。

9.2.9.1 <u>シンボルリンク</u>

- シンボルファイルをインポートする場合、以下の制限事項があります。

  <u>未対応データタイプ</u>

  - ➢ ENUM

  - ➢ INTERFACE

  <u>指定された既存データタイプに変換されるデータタイプ</u>

  - ➢ SUBRANGE

  - ➢ POINTER TO

  - ➢ REFERENCE

  <u>構造体データタイプに変換されるデータタイプ</u>

  - ➢ UNION

  - ➢ FUNCTION_BLOCK

- Rockwell L5K ファイルの NamedBasic タイプの変数は、シンボルリンクで文字列変数として取り込まれます。

- IEC フォーマットに準拠しない Unity-Pro ファイルのアドレスがシンボルリンクにて取り込まれます。これらの変数のアドレスは空欄状態になっているので、削除してください。

- %IWS と %QWS は SoMachine Basic File only Modbus (.SMBP)から取り込むことができません。

- インポートしたシンボルファイルにサポートされていない文字を含む PLC 変数があると、[Invalid unicode character]エラーが表示される場合があります。可能であれば、PLC ソフトウェアで変数の名前を変更してください。

- 機器名とフォルダ名は、プロジェクトファイル内で一意である必要があります。シンボルリンク機能を使用する場合は、シンボルファイルをインポートする前に、名称が重複していないことを確認してください。

- SoMachine Basic File only Modbus (.SMBP)に Time タグまたは Counter タグが含まれる場合はインポートすることができません。SoMachine Basic File only Modbus から Time タグまたは Counter タグを削除した後に、インポートしてください。

9.2.10 Web Viewer

- [プロジェクトエクスプローラー]の[作画] - [画面]以下に、画面を含まないフォルダーが存在するプロジェクトで Web Viewer を使用すると、Web Viewer クライアントから画面が操作できなくなる場合があります。

9.3 転送時の制限事項

- 転送失敗後に表示される復旧転送用画面では、ファイルシステム転送によってランタイムバージョンをバージョン 3.1.100 未満からアップグレードすることはできません。

- プロジェクトファイルを転送中に[ALT]キーを押すと、転送に失敗する場合があります。

- 多くの画像ファイルを含むプロジェクトファイルを表示器に転送した場合、転送に時間を要する場合があります。

9.3.1 IPC シリーズ、PC/AT

- バージョン 3.1 以前のランタイムをご使用の場合、バージョン 3.1 Service Pack1 以降のプロジェクトファイルを転送することはできません。
  転送しようとすると、画面編集ソフトウェア上で以下のエラーメッセージが表示されます。
  [ダウンロード操作では更新はできません。インストーラーを使用して、ランタイムを最新バージョンに更新してください。]
  転送するには、最新バージョンのランタイムをインストールする必要があります。
  インストーラーDVD の以下のパスから、ランタイムのインストールを開始できます。
  "¥BLUE_Setup¥BLUERuntime¥BLUERuntime.exe"
  最新バージョンのランタイムをインストールすると、インストール前に転送されていたプロジェクトファイルが消去されます。インストール後にプロジェクトファイルを再度

転送してください。

.NET Framework がまだインストールされていない場合、またはそのバージョンが古い場合、.NET Framework もインストールされます。.NET Framework のインストール後、インストール先が再起動されます。

最新バージョンのランタイムをインストールするために、既にインストールされているランタイムをアンインストールする必要はありません。

9.4 表示器使用時の制限事項

9.4.1 表示器

- 以下の機能を特定の設定で使用した場合に、表示器が正しく動作しない場合があります。

  - ➢ 長い文字列を含む文字列変数で、多数のアラームレコードを設定した場合

  - ➢ 非常に大きな値の 64 ビットの変数で、多数のロギングデータレコードを設定した場合

9.4.2 画面 / コンテンツ

- スクロールグリッドコンテンツのサイズが表示先のコンテンツ表示器のサイズより小さい場合、スクロールグリッドコンテンツのサイズはコンテンツ表示器のサイズに拡張されます。

- システムエラーが頻繁に発生する等、間断なくバックアップメモリーへのアクセスが発生している状態で、多くの変数で値の変化が発生している場合、値の変化が正しく画面描画へ反映されない場合があります。

- 表示器と接続機器の通信が不安定な場合、画面切り替え時に表示器の画面が数秒間フリーズする場合があります。

- [Target01]プロパティウィンドウで[画面 ID]プロパティに変数をバインドした場合、前画面へ戻る機能が正しく動作しない場合があります。

9.4.3 ハードウェア設定画面

- ハードウェア設定画面上の操作によりランタイムが再起動した時、外部ストレージの認識状態が更新されない場合があります。
  この場合は、表示器の電源を再投入してください。

- ハードウェア設定画面内の操作ログ画面でフィルター設定画面[Filter Simplified]からフィルターを実行した場合、項目が正しく表示されない場合があります。

- Pro-face Connect の初回設定時、ハードウェア設定画面で設定を変更した後に[Save & Restart]をタッチしてから、表示器の電源を再投入して再起動してください。

- ハードウェア設定画面では、ドライバーごとに最大 32 台の機器の Scan Off Control が表示されます。 ハードウェア設定画面から Scan Off Control を変更できない場合は、機器

のソースプロパティ '.ScanOffControl'を使用して Scan Off Control を変更してください。

9.4.4 キーパッド

● キーパッド表示中に高速でタッチを繰り返した場合、押下時の反転表示が表示されない場合があります。
これは表示だけの問題で、値の書き込みは正常に行われます。

9.4.5 部品 / 図形

9.4.5.1 テキストボックス

● テキストボックスオブジェクトで太字属性を使用すると、画面編集ソフトウェアと表示器で表示される文字の太さが異なる場合があります。

9.4.5.2 アラーム表示器

● アラーム表示器のフィルター設定画面[Filter Simplified]に表示できる項目は 146 個までです。146 個以上の項目がある場合は、[Search]にテキストを入力して絞り込むか、フィルター詳細設定画面[Filter Detailed]を使用してください。

● アラーム表示器のフィルター設定画面[Filter Simplified]でフィルターを実行した場合、項目が正しく表示されない場合があります。

9.4.5.3 数値表示器

● 数値表示器の[現在値]に、コンバーターと一緒にソースプロパティを設定している場合、数値表示器の[フォーマット]および[小数点桁数]プロパティが設定可能にもかかわらず、設定内容が適用されません。これらのプロパティの代わりに、コンバーターのプロパティで設定された内容が適用されます。対象のコンバーターは以下になります。

  ➢ 単位

  ➢ スケール

  ➢ 定義式

上記は正しい動作であり、将来のバージョンアップにより、数値表示器の[フォーマット]および[小数点桁数]プロパティは、上記の場合では表示が無効になります。

● [Arabic_Gothic]または[Hebrew_Gothic]フォントで接頭辞や接尾辞を設定すると、表示器上の数値表示器で文字の順序が間違って表示されます。

9.4.5.4 文字列表示器

● IME で日本語入力する文字列表示器で[テキストを*として表示]を有効にしないでください。文字を入力する際に、現在格納されている文字列が表示されます。[テキストを*として表示]プロパティを使用する場合は、入力を開始する前に文字列をクリアするようにシステムを設計してください。

9.4.5.5 ウェブブラウザー

- ウェブブラウザー部品で TIFF および MNG 画像ファイルが非対応となりました。

- ウェブブラウザー部品で、パスを利用した動的なコンテンツを表示すると、正しく表示されない場合があります。

9.4.6 トリガー / オペレーション

- タッチ中のオブジェクトが、他のオブジェクトのアニメーションや、可視の変化によって隠された場合、タッチトリガー(Click または Release)はそのタイミングでは発生しません。トリガーはタッチ中オブジェクトが隠されていないものと認識して動作します。

- [All]がチェックされている[配列]オペレーションの数が多いほど、初回の画面切替時間が遅くなります。

- [ファイル管理]オペレーションを使用する場合、ファイルまたはフォルダー名の文字が英語でない場合は[ファイル管理]オペレーションで表示されるダイアログ上でファイルまたはフォルダー名が正しく表示されません。

- 外部ストレージが表示器に認識されていない状態で[外部ストレージ]オペレーションが実行された場合に、システムエラーが発生しません。

- [オペレーションの結果]オペレーションを使用する場合、指定したオペレーションが失敗したときに、正しい結果が得られない場合があります。

9.4.7 ロギング

- [ファイル管理]オペレーションの実行中は、ログの周期によってはデータがログされない場合があります。

- トレンドグラフの表示点数、ロギンググループの最大レコード数、および使用している表示器の組み合わせによっては、トレンドグラフの表示が非常に遅くなる場合があります。トレンドグラフの表示点数は下記設定で増減します。

  - チャンネル数

  - 単位

- ロギング機能を使用する場合、以下を設定できます。
  ロギンググループ：最大レコード数、エクスポート先の外部ストレージ、および割り当てられた変数の数
  トレンドグラフ部品：チャンネル数と単位（表示されているポイントの数）
  上記の設定、実行時に表示される画面構成、表示器によっては、以下の処理に時間がかかる場合があります。

  - ロギングデータのエクスポート

  - トレンドグラフの表示

9.4.8 ネットワーク

- 運転中、ローカルネットワーク上に存在する他の機器と重複する IP アドレスを設定しようとする場合や、表示器と重複する IP アドレスを持つ機器をローカルネットワークに接続した場合、IP アドレスの重複を検出できません。
ランタイム起動時のみ、ローカルネットワーク上に存在する機器の IP アドレスをチェックし、表示器と重複があればシステムエラーを発報します。
表示器の IP アドレス変更後はランタイムが再起動されますので、再起動後にシステムエラーが発報されていないか確認してください。

9.4.9 Web Viewer

- プロジェクトの転送が失敗した場合、Web Viewer ライセンスは削除されます。同じライセンスキーコードを使用して、表示器で Web Viewer を再度追加してください。

- 配管オブジェクトで、[影]を有効にし、完全に水平または垂直な形状で使用した場合、iOS および iPadOS 上の Web Viewer で正しく表示されない場合があります。

9.4.10 OPC UA サーバー

- OPC UA サーバー機能を使用している場合、表示器は初回起動時にサーバー証明書を生成します。また、OPC UA クライアントは初回の接続時にサーバー証明書を確認します。
以下の場合、サーバー証明書が更新されるため、OPC UA クライアントによるサーバー証明書の確認が再度必要になる場合があります。

  - ハードウェア設定画面にある OPC UA サーバーのメニューから証明書の再発行 (Regenerate Certificate)を行った場合

  - ファイルシステムによる転送を行った場合（イーサネットまたは USB ケーブルによる転送の場合、この問題は発生しません）

9.4.11 ドライバー

- Schneider Electiric の Modbus タイプのドライバを使用している場合に、TM デバイスを含むシンボルファイルをインポートすると、それらのシンボルもインポートされます。ただし TM デバイスは未サポートのため、動作しません。

- Schneider Electric - Machine Expert Network ドライバーで、配列の構造体に 'X'や'Y'という変数名の要素が存在する場合、これらの変数を使用するとランタイムが正しく通信しないことがあります。

9.4.12 SP5000X シリーズ、SP5000 シリーズパワーボックス / オープンボックス

- CANopen Slave ドライバーと TIA Portal Ethernet ドライバーを同時使用する場合、他のドライバーを同時に使用しないでください。CANopen Slave ドライバーの通信が止まる恐れがあります。

9.4.13 **GP-4100** シリーズ

9.4.13.1 <u>CoDeSys Automation Alliance - CoDeSys V2 Ethernet / Schneider Electric - PacDrive</u>

- GP4100 シリーズと以下のドライバーを使用すると、接続に関するシステムエラーが発生することがあります。

    ➢ CoDeSys Automation Alliance - CoDeSys V2 Ethernet

    ➢ Schneider Electric – PacDrive

9.4.14 **ST6000** シリーズ

- フロー制御で XON/XOFF が動作しません。

9.4.15 **IPC** シリーズ、**PC/AT**

- ロギング、操作ログ、アラームのエクスポート先として、マルチバイト文字を含むフォルダー名またはファイル名を使用する場合、表示器の OS でシステムロケールを適切に設定する必要があります。

- 画像表示器の[保存先フォルダー]および画像のファイル名にマルチバイト文字を含む場合、表示器の OS でシステムロケールを適切に設定する必要があります。

- ランタイムをインストール後に初めて起動する場合は、スタートメニューから[BLUE Runtime]のアイコンを右クリックして表示されるメニューから[管理者として実行]を選択してください。管理者として実行しない場合、Welcome Screen が表示されない場合があります。

- ランタイムのインストール先に Unicode 文字を含むパスを指定しないでください。インストールできません。Unicode 文字を含まないパスを指定してください。

- ランタイムアプリケーションを起動した後に、タッチ機能を備えたディスプレイの電源を投入した場合、タッチが効かなくなる場合があります。アプリケーションを起動する前にディスプレイの電源を投入してください。

9.4.16 外部ストレージ**(SD** カード **/ USB** ストレージ**)**

- 間断なく USB ストレージへのアクセスが発生している状態で、USB 取り出しを実行しても動作しない場合があります。
  USB ストレージへのアクセスを中断する機能を設けるか、アクセス先のストレージを変更するなどの対応を行ってください。

9.5 サイバーセキュリティ

- 信頼できるプロジェクトファイルのみ画面編集ソフトウェアで開いてください。

- BLUE Runtime は、潜在的なサイバーセキュリティの脆弱性を持つ可能性のある古い Schneider Electric License Manager コンポーネントを使用しています。
  CWE-74 : Improper Neutralization of Special Elements in Output Used by a Downstream Component ('Injection')

詳細は以下をご参照ください。
https://cwe.mitre.org/data/definitions/74.html

10 インストーラーの整合性検証

弊社ウェブサイトまたは Schneider Electric Software Update からインストーラーをダウンロードした場合、インストーラーの SHA256 が取得できます。インストーラー入手後、以下の手順に従って、SHA256 のチェックを行ってください。

手順 1：Windows のスタートメニューから[Windows PowerShell] > [Windows PowerShell]を起動します。

手順 2：'Get-FileHash' にダウンロードしたファイルのファイルパスを指定します。

PS C:¥Users¥UserName> Get-FileHash　'C:¥Users¥Public¥Downloads¥Schneider Electric¥Software Update¥Downloads¥<installer executable fine name>'　(例 Soft_BLUE64_V34.exe)

手順 3：Enter キーを押します。指定したファイルのハッシュが以下のように表示されます。

PS C:¥Users¥UserName> Get-FileHash 'C:¥Users¥Public¥Downloads¥Schneider Electric¥Software Update¥Downloads¥<installer executable fine name>'

*Algorithm　　　　　Hash
Path*

*---------　　　　　----　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　-
---*

*SHA256
BCE70FCF3AA21663F828CF9244102533592F5721B10D6ABA1C050A5B815076EB
C:¥Users¥Public¥Downloads¥...:*

手順 4：ファイルのハッシュと、ウェブサイトまたは Schneider Electric Software Update から取得した SHA256 を比較してください。

11 オープンソースソフトウェアについて

本製品に使用するオープンソースソフトウェアには、以下に記載の著作権で保護されているものが含まれます。

11.1　LUA Plus

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11.2   SQLCipher

11.3   OpenSSL

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11.16 log4net

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11.17 MessagePack

MessagePack for C#

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11.22 Newtonsoft.Json

11.23 Nlog

11.24

Reactive Extensions(RxCore, Rx-Interfaces,Rx-Linq,Rx-Main,Rx-PlatformServices)

11.25

System.Collections.Immutable
System.Configuration.ConfigurationManager
System.Reflection.Emit
System.Reflection.Metadata

System.Threading.Tasks.Extensions
System.ValueTuple

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11.27 GongSolutions.Wpf.DragDrop

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11.28 XamlAnimatedGif

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11.33 Webkit

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11.35 JavaScriptCore

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11.37 ICU

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#
#
#   The word list in cjdict.txt are generated by combining three word lists
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4. Burmese Word Break Dictionary Data (burmesedict.txt)

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Database section 7.

11.38 libmng

```
/* * is defined as the following set of individuals:                    * */
/* *                                                                     * */
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/* *      Glenn Randers-Pehrson                                           * */
/* *                                                                     * */
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/* * the MNG and JNG file format in commercial products.   If you use this    * */
/* * source code in a product, acknowledgment would be highly appreciated.   * */
/* *                                                                     * */
/* ************************************************************************ */
/* *                                                                     * */
/* * Parts of this software have been adapted from the libpng package.     * */
/* * Although this library supports all features from the PNG specification * */
/* * (as MNG descends from it) it does not require the libpng package.      * */
/* * It does require the zlib library and optionally the IJG jpeg library,    * */
/* * and/or the "little-cms" library by Marti Maria (depending on the        * */
/* * inclusion of support for JNG and Full-Color-Management respectively.     * */
/* *                                                                     * */
/* * This library's function is primarily to read and display MNG          * */
/* * animations. It is not meant as a full-featured image-editing          * */
/* * component! It does however offer creation and editing functionality    * */
/* * at the chunk level.                                                  * */
/* * (future modifications may include some more support for creation       * */
/* *   and or editing)                                                   * */
/* *                                                                     * */
/* ************************************************************************ */
```

11.39 libjpeg

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algorithm; the resulting GIF files are larger than usual, but are readable
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11.40 PCRE

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THE BASIC LIBRARY FUNCTIONS

Written by: Philip Hazel
Email local part: Philip.Hazel
Email domain: gmail.com

Retired from University of Cambridge Computing Service,
Cambridge, England.

PCRE2 JUST-IN-TIME COMPILATION SUPPORT

Written by: Zoltan Herczeg
Email local part: hzmester
Email domain: freemail.hu

STACK-LESS JUST-IN-TIME COMPILER

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11.41 zlib

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11.43 rxi/json.lua

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That's all there is to it!

11.45 LuaFileSystem

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