### oDesktop

GetDistributedAnalysisMachines

AddMessage ClearMessages CloseAllWindows CloseProject CloseProjectNoForce DeleteProject DoesRegistryValueExist DownloadJobResults DeleteRegistryEntry EnableAutoSave ExportOptionsFiles GetActiveProject GetAutoSaveEnabled GetBuildDateTimeString GetDefaultUnit

GetGDIObjectCount GetLocalizationHelper GetLibraryDirectory GetMessages GetPersonalLibDirectory GetProcessID GetProjectDirectory GetProjectList GetProjects

GetRegistryInt GetRegistryString GetRunningInstancesMgr GetScriptingToolsHelper GetSysLibDirectory GetTempDirectory GetUserLibDirectory GetVersion GetTool

GetDistributedAnalysisMachinesForDesignType

GetExeDir

LaunchJobMonitor NewProject **OpenAndConvertProject OpenMultipleProjects OpenProject OpenProjectWithConversion** 

PauseScript PageSetup PauseRecording RefreshJobMonitor Print QuitApplication RestoreWindow ResetLogging RestoreProjectArchive ResumeRecording RunACTWizardScript RunProgram RunScript RunScriptWithArguments SelectScheduler SetActiveProjectByPath SetLibraryDirectory SetActiveProject SetProjectDirectory SetRegistryFromFile SetRegistryInt SetTempDirectory ShowDockingWindow

SetRegistryString

SubmitJob TileWindows Sleep

# oProject

AddDataset AddMaterial AnalyzeAll ChangeProperty ClearMessages CloneMaterial CopyDesign Close CutDesign

DeleteDataset DeleteDesign DeleteToolObject EditDataset EditMaterial ExportDataset **ExportMaterial** GetActiveDesign GetArrayVariables GetChildNames GetChildObject GetChildTypes GetConfigurableData GetDefinitionManager GetDependentFiles GetEDBHandle GetDesign GetDesigns GetLegacyName GetName GetObjPath GetPath GetPropNames GetPropValue **GetProperties** GetPropertyValue GetTopDesignList GetVariableValue GetVariables ImportDataset InsertDesign InsertDesignWithWorkflow InsertToolObject

PasteDesignBlock Redo Paste

RemoveUnusedDefinitions RemoveAllUnusedDefinitions RemoveMaterial

Rename Save SaveAs

SetActiveDefinitionEditor SaveAsStandAloneProject SaveProjectArchive

SetActiveDesign SetPropValue SetPropertyValue

SetVariableValue SimulateAll Undo

**UpdateDefinitions** 

# **oDefinitionManager**

AddComponent AddDataset AddFootprint AddMaterial AddPadstack AddScript AddSurfaceMaterial AddSymbol ChangeProperty CloneMaterial CreateComponentData DeleteDataset

DoesMaterialExist DoesSurfaceMaterialExist EditComponent

EditDataset EditFootprint EditMaterial

EditPadstackEditScriptEditSurfaceMaterialEditSymbolExportComponentExportDatasetExportFootprintExportMaterialExportPadstackExportScriptExportSurfaceMaterialExportSymbol

GetInUseProjectMaterialNames GetManager GetMaterialNamesInConfiguredLibraries

GetProjectMaterialNamesGetPropertiesGetPropertyValueImportDatasetModifyLibrariesRemoveComponentRemoveFootprintRemoveMaterialRemovePadstackRemoveScriptRemoveSurfaceMaterialRemoveSymbol

SetPropertyValue UpdateDefinition UpdateDefinitionFromLib

## oDesign

AbortSolveAsynch AddDataset Analyze

AnalyzeAll AnalyzeAllNominal AnalyzeDistributed
ApplyMeshOps ChangeProperty ClearLinkedData
ConstructVariationString DeleteDataset DeleteFieldVariation
DeleteFullVariation DeleteLinkedDataVariation DeleteVariation
DistributeAnalysis EditDataset EditNotes

ExportConvergence ExportDataset ExportMeshStats

ExportProfile GenerateMesh GenerateModelDef

GenerateModelDefForMeshAssemblyManager GenerateSolverInputFiles GetArrayVariables

GetChildNames GetChildObject GetChildTypes

GetChildNames
GetChildObject
GetChildObject
GetChildTypes
GetConfigurableData
GetData
GetData
GetDesignType
GetNominalVariation
GetNoteText
GetObjPath
GetOutputVariableValue
GetOutputVariables

GetPostProcessingVariablesGetPropNamesGetPropValueGetPropertiesGetPropertyValueGetSolutionTypeGetSolveAsynchStatusGetSolveInsideThresholdGetVariableValue

GetVariables GetVariationVariableValue HasDataset
ImportDataset IsDesignEncrypted Paste
Redo RenameDesignInstance RunToolkit

SARSetup SetActiveEditor SetAllowMaterialOverride
SetDesignSettings SetDoMeshAssembly SetObjectDeformation
SetObjectTemperature SetPropValue SetSolutionType SetSolveInsideThreshold SetTuningRanges

SetVariableValue SimulateLink Solve SolveAsynch StopSimLink Undo

ValidateDesign ValidateLink

#### **Editor**

AddViewOrientation AlignFaces AssignMaterial
AssignSurfaceMaterial BreakUDMConnection Chamfer

ChangeProperty CleanUpModel CloseAllWindows
Connect Copy CoverLines

ConnectCopyCoverLinesCoverSurfacesCreate3DComponentCreateBondwireCreateBoxCreateCircleCreateComponentCreateConeCreateCutplaneCreateCylinderCreateEllipseCreateEntityListCreateEquationCurve

CreateEquationSurface CreateFaceCS CreateGroup

CreateHelix CreateObjectCS CreateObjectFromEdges

CreateObjectFromFaces CreatePoint

CreatePolyline CreateRectangle CreateRegion

CreateRegularPolygon CreateRegularPolyhedron CreateRelativeCS

CreateSphere CreateSpiral CreateTorus

CreateUserDefinedModel CreateUserDefinedPart CustomGeometryOperation

Defeature DeletPolylinePoint Delete

DeleteEmptyGroupsDeleteLastOperationDeleteOperationDeletePolylinePointDetachEdgeDetachEdges

DetachFaceDetachFacesDoModalValidationForTestDoesGeometryMatchForTestDuplicateAlongLineDuplicateAroundAxisDuplicateMirrorEdit3DComponentEdit3DComponentDefinitionEditEntityListEditFaceCSEditNativeComponentDefinition

EditObjectCS EditPolyline EditRelativeCS

FitAll

Fillet

Export ExportGDSII ExportModelImageToFile

GenerateAllUserDefinedModels GenerateFacetDataForModel GenerateHistory
GenerateUserDefinedModel Get3DComponentDefinitionNames Get3DComponentInstanceNames

Get3DComponentMaterialNames

Get3DComponentMaterialProperties

Get3DComponentParameters

Get3DComponentParameters

Get3DComponentParameters

Get3DComponentParameters

Get3DComponentParameters

GetChildNames GetChildObject GetChildTypes

GetCoordinateSystems GetEdgeByPosition GetEdgeIDFromNameForFirstOperation

FlattenGroup

GetEdgeIDsFromFace GetEdgeIDsFromObject GetEdgeLength
GetEdgePositionAtNormalizedParameter GetEntityListIDByName GetFaceArea

GetFaceByPosition GetFaceCenter GetFaceIDFromNameForFirstOperation

GetFaceIDs GetFaceIDsOfSheet GetFullGeometry

GetGeometryModelerMode GetGroupSubmodelNames GetMatchedObjectName

GetModelBoundingBox GetModelDrawAttributes GetModelUnits
GetName GetNumObjects GetObjPath

GetObjectIDByName GetObjectName GetObjectNameByEdgeID
GetObjectNameByFaceID GetObjectNameByID GetObjectNameByVertexID

GetObjectShapeType GetObjectsByMaterial GetObjectsInGroup

GetOperationIndexGetPartsForUserDefinedModelGetPointsGetPropNamesGetPropValueGetPropertiesGetPropertyValueGetRelativeCoordinateSystemsGetSelections

GetSubGroupsInGroup GetUserPosition GetVertexIDFromNameForFirstOperation

GetVertexIDsFromEdge GetVertexIDsFromFace GetVertexIDsFromObject

GetVertexPosition GetWireBodyNames HealObject

ImportImportDXFImportFromClipboardImportGDSIIImprintImprintProjectionInsert3DComponentInsertComponentInsertNativeComponent

InsertPolylineSegment Intersect Make3DComponentIndenpendent

MirrorMoveMoveCSToEndMoveEdgesMoveEntityToGroupMoveFaces

ObjectExists OffsetFaces OpenExternalEditor

PageSetup Paste PerformExplicitSubtractions

ProjectSheet ProjectUDPParametersToValidPlane ProjectUDPParametersToValidPlane2

PurgeHistory RefreshAllUserDefinedModelFrom RefreshUserDefinedModelFrom

RefreshUserDefinedModelTo RemoveBadEdges RemoveBadFaces

RemoveBadVertices RenamePart ReplaceWith3DComponent

RotateScaleSectionSendParametersAndGenerateUserDefineModelSeparateBodySetModelUnitsSetModelValidationSettingsSetPropValueSetPropertyValue

SetTopDownViewDirectionForActiveView SetTopDownViewDirectionForAllViews SetWCS ShowWindow Simplify SetItopDownViewDirectionForAllViews SetWCS

Stitch Subtract SweepAlongPath

SweepAlongVector SweepAroundAxis SweepFacesAlongNormal

SweepFacesAlongNormalWithAttributes ThickenSheet UncoverFaces

UngroupUniteUpdateComponentDefinitionUpdatePriorityListUpgradeVersionValidate3DComponent

WrapSheet WriteAttributesBlockForTest WriteHistoryTreeLayoutForTest

### oTool-NdExplorer

CheckCausality ExportFullWaveSpice ExportNMFData

ExportNetworkData ExtractImpulseResponse SetExportTouchstoneOptions

#### oTool-ImportExport

ImportANF ImportANFV2 ImportAWRMicrowaveOffice

ImportAutoCADImportEDBImportExtractaImportGDSIIImportGerberImportIDFImportIDFandMergeImportIPCImportODB

ImportXFL

EditDiffPairs

### oModule-BoundarySetup

AddAssignmentToBoundary AlphaNumericMatrix AssignAnisotropicImpedance

AssignAperture AssignCableNetwork AssignCircuitPort
AssignCurrent AssignCylindricalWave AssignDCThickness
AssignDielectricCavity AssignFEBI AssignFarFieldWave
AssignFiniteCond AssignFloquetPort AssignFresnel

AssignGaussianBeam AssignHalfSpace AssignHertzianDipoleWave

AssignHybridRegion AssignIERegion AssignImpedance
AssignLinearAntennaWave AssignLinkedImpedance AssignLinkedRegion
AssignLumpedPort AssignLumpedRLC AssignMagneticBias
AssignMaster AssignMultipactionChargeRegion AssignMultipactionDCBias

AssignMultipactionSEE AssignNearFieldWave AssignPerfectE
AssignParfectH AssignPlaneWave AssignPrimary
AssignRadiation AssignSecondary AssignSlave
AssignSymmetry AssignTerminal AssignVoltage
AssignWavePort AutoIdentifyLatticePair AutoIdentifyPorts

AutoIdentifyTerminals ChangeImpedanceMult CircuitPortToLumpedPort

ConvertNportCircuitElementToPortsCreateNportCircuitElementCreatePMLDeleteAllBoundariesDeleteAllExcitationsDeleteBoundariesEditAnisotropicImpedanceEditApertureEditCableNetworkEditCircuitPortEditCurrentEditDielectricCavity

**EditFEBI** 

EditFloquetPort EditFresnel EditGlobalCurrentSourcesOption

EditFiniteCond

EditGlobalMatEnv EditHalfSpace EditHybridRegion
EditImpedance EditIncidentWave EditLatticePair
EditLayeredImp EditLinkedImpedance EditLinkedRegion
EditLumpedPort EditLumpedRLC EditMagneticBias
EditMaster EditMultipactionChargeRegion EditMultipactionDCBias

EditMultipactionSEEEditNportCircuitElementEditPerfectEEditPerfectHEditPrimaryEditRadiationEditSecondaryEditSlaveEditSymmetryEditTerminalEditVoltageEditWavePort

GetBoundaries GetBoundariesOfType GetBoundaryAssignment

GetDefaultBaseName GetDiffPairs GetExcitations

GetExcitationsOfType GetHybridRegions GetHybridRegionsOfType
GetNumBoundaries GetNumBoundariesOfType GetNumExcitations

GetNumExcitationsOfType GetNumHybridRegions GetNumHybridRegionsOfType
GetPortExcitationCounts IdentifyNets LumpedPortToCircuitPort

ModifyPMLGroup ReassignBoundary RenameBoundary

SetAllHybridRegionsToOneWayCoupled

SetHybridRegionsCoupling

SetSBRSources

SetScatteredFieldFormulation

SetTotalFieldFormulation

PMLGroupCreated

RecalculatePMLMaterials

ReorderMatrix SetAllHybridRegionsToTwoWayCoupled

SetPhaseCenterPerPort SetSBRTxRxSettings

SetSinglePhaseCenter SwapCircuitPortDirection PMLGroupModified

RemoveAssignmentFromBoundary

ReprioritizeBoundaries SetDefaultBaseName

SetSBRCreepingWaveSettings

SetSBRWedgeSettings

SetTerminalReferenceImpedances

SwapLatticePair

### oModule-MeshSetup

As sign Apply Curvlinear Elements OpAssignCylindricalGapOp AssignEdgeCutLayerOp AssignRotationalLayerOp AssignTrueSurfOp EditCloneOp EditDefeatureOp EditLengthOp EditSkinDepthOp

RenameOp

GetOperationNames

AssignCloneOp AssignCurvatureExtractionOp AssignDefeatureOp AssignDensityControlOp AssignModelResolutionOp AssignLengthOp AssignSkinDepthOp AssignSurfPriorityForTauOp DeleteOp EditApplyCurvlinearElementsOp

EditCurvatureExtractionOp EditCylindricalGapOp EditDensityControlOp EditEdgeCutLayerOp EditModelResolutionOp EditRotationalLayerOp EditSurfPriorityOp EditTrueSurfOp InitialMeshSettings ReassignOp

### oModule-AnalysisSetup

ClearLinkedData CopySweep DeleteSweep EditFrequencySweep

GetSetups

InsertDrivenSweep

InsertSetup PasteSweep RenameSweep

CopySetup

RevertAllToInitialTemperature

Revert Setup To Initial Temperature

CopyDrivenSetup DeleteDrivenSweep DoesSweepSetupExists

EditSetup GetSweepCount

InsertFrequencySweep PasteDrivenSetup

RenameDrivenSweep ResetToTimeZero

RevertSetupToZeroDisplacement

RevertAllToZeroDisplacement

CopyEigenSetup DeleteSetups EditDrivenSweep GetSetupCount

GetSweeps InsertMeshLinkedSetup

PasteEigenSetup RenameSetup RevertAllToInitial RevertSetupToInitial

SolveSetup

# oModule-Optimetrics

EditSetup ExportDOELocalSensitivityCurve ExportDOEResponseSurface

ExportOptimetricsResult ExportRespSurfaceMinMaxTable ExportRespSurfaceResponsePoints

GetChildNames GetName

GetOptimetricResultRowCount

GetSetupNames InsertSetup SetPropValue

DeleteSetups EnableSetup

ExportDOEResponseCurve ExportDXConfigFile

ExportParametricResults ExportRespSurfacePlotToFile ExportRespSurfaceVerificationPoints

GetChildObject GetObjPath GetPropNames GetSetupNamesByType

PasteSetup SolveAllSetup DistributedAnalyzeSetup ExportDOELocalSensitivity

ExportDOEResponseCurveSlices ExportOptimetricsProfile ExportParametricSetupTable

**ExportRespSurfaceRefinePoints** GenerateVariationData GetChildTypes

GetOptimetricResult GetPropValue ImportSetup RenameSetup SolveSetup

#### oModule-Solutions

DeleteImportData **DeleteSolutionVariation** EditSources

ExportEigenmodes ExportForHSpice ExportForSpice ExportNMFData ExportNetworkData ExportTransientData ExportWElement **FFTOnReport** GetAdaptiveFreq GetAdaptiveSettings GetAllSourceMagnitudes GetAllSourceModes GetAllSourcePhases GetAllSources GetAntennaParameters GetAvailableVariations GetEditSourcesCount **GetExcitationScaling** GetIncludePortPostProcessing GetMultipactionBreakdown GetFieldType GetNetworkDataSolution GetNetworkDataSolutionDefinition GetNetworkDataSolutionV2

GetNetworkPostprocSetup GetSolveRangeInfo GetSourceContexts

GetTerminalExcitationType GetTransientSolveTimes GetTransmissionLineNetworkData

GetValidISolutionList HasFields HasMatrixData
HasMesh ImportSolution ImportTable

IsFieldAvailableAt ListMatchingVariations ListValuesOfVariable

ListVariations SetExcitationScaling SetPortSourcesUsingVoltageAndCurrent

SetSourceContexts SetTuningOffsets TDROnReport

### oModule-ModelSetup

AssignArray CreateOpenRegion DeleteArray
EditArray GetArrayNames GetLatticeVectors

IsArrayDefined UpdateOpenRegionPadding

# oModule-FieldsReporter

AddMarkerAddMarkerToPlotAddNamedExprAddNamedExpressionCalcOpCalcReadCalcStackCalcWriteCalculatorReadCalculatorWriteChangeGeomSettingsClcEval

ClcMaterialClcMaterialValueClearAllMarkersClearAllNamedExprCopyNamedExprToStackCreateFieldPlotDeleteFieldPlotDeleteMarkerDeleteNamedExprDeleteUneditablePlotDoesNamedExpressionExistsDumpCalculatorStack

EnterComplex

EnterComplexVector

EnterCoord

EnterEdge

EnterLine

EnterOutputVar

EnterPoint

EnterQty

EnterScalar

EnterScalarFunc

EnterScurf

EnterVectorFunc

EnterVol

ExportFieldPlot

ExportMarkerTable ExportOnGrid ExportPlotImageToFile ExportToFile GetFieldFolderNames GetFieldPlotNames

GetMeshPlotNamesGetTopEntryValueHideAntennaParameterOverlayHidePolarPlotHideRadiatedPlotOverlayLoadNamedExpressionsModifyFieldPlotReassignFieldPlotRenameFieldPlotRenamePlotFolderSaveFieldsPlotsSaveNamedExpressionsSetFieldPlotSettingsSetPlotFolderSettings

SetPlotsSolutionContext SetPlotsViewSolutionContext ShowAntennaParameterOverlay

ShowPolarPlot ShowRadiatedPlotOverlay Test
UpdateAllFieldsPlots UpdateQuantityFieldsPlots XForm

#### oModule-RadField

AddAntennaOverlay AddRadFieldSourceGroup CopyRadFieldSetup DeleteFarFieldSetup DeleteNearFieldSetup CopySetup DeleteSetup EditAntennaArraySetup EditAntennaOverlay EditBoxSetup EditFarFieldSphereSetup EditInfiniteSphereSetup EditLineSetup EditNearFieldBoxSetup EditNearFieldLineSetup EditNearFieldRectangleSetup EditNearFieldSphereSetup EditRadFieldSourceGroup

EditRadiatedPowerCalculationMethod EditRectangleSetup EditSphereSetup

ExportFieldsToFile ExportParametersToFile

ExportRadiationFieldsToFile ExportRadiationParametersToFile ExportRadiationSurfaceMeshAndFields

ExportRadarRom

GetChildObject GetChildNames GetChildTypes GetInfiniteGroundPlaneCoordSystem GetObjPath GetName GetPropNames GetPropValue GetSetupNames

InsertBoxSetup InsertFarFieldSphereSetup InsertInfiniteSphereSetup InsertLineSetup InsertNearFieldBoxSetup InsertNearFieldLineSetup InsertNearFieldRectangleSetup InsertNearFieldSphereSetupInsertRectangleSetup

InsertSphereSetup PasteRadFieldSetup PasteSetup SetPropValue RenameSetup

# oModule-ReportSetup

AddCartesianLimitLine AddCartesianLimitLineFromCurve AddAllEyeMeasurements

AddCartesianLimitLineFromEquation AddCartesianXMarker AddCartesianYMarker

AddCartesianYMarkerToStack AddDeltaMarker AddMarker AddTraceCharacteristics AddNote AddTraces ApplyReportTemplate ChangeProperty ClearAllMarkers

ClearAllTraceCharacteristics Clone Reports From Dataset SolutionCompareReportDataForRegressionTesting CompareTracesForRegressionTesting2

CompareReportDataForRegressionTesting2 CompareTracesForRegressionTesting CopyPlotSettings CopyReportDefinitions CopyReportsData

CopyTraceDefinitions CopyTracesData CreateReport

CreateReportFromFile CreateReportFromTemplate CreateReportOfAllQuantities DeleteAllReports DeleteReports DeleteTraceCharacteristics DeleteTraces DoesSupportTraceCharacteristics DumpAllReportsData

DumpReportDataForRegressionTesting EditCartesianXMarker EditCartesianYMarker ExportEyeMaskViolation ExportImageToFile EditMarker

ExportReportDataToFile ExportTableToFile ExportToFile ExportUniformPointsToFile GetAllCategories GetAllQuantities

GetAllReportNames GetAvailableDisplayTypes GetAvailableReportTypes

GetAvailableSolutions GetChildNames GetChildObject GetChildTypes GetCurvePropServerName GetDisplayType

GetDynLinkIntrinsicVariables GetDynLinkQtyData GetDynLinkQtyValueState

GetDynLinkTraces GetName GetDynLinkVariableValues GetObjPath GetPropNames GetPropValue

**GetPropertyValue** GetQtyExpressionsForSourceTrace GetReportSummaryForRegressionTesting

**GetSolutionDataPerVariation** GetReportTraceNames GetSolutionContexts GroupPlotCurvesByGroupingStrategy ImportIntoReport ImportReportDataIntoReport MovePlotCurvesToGroupMovePlotCurvesToNewGroupOpenWindowForAllReports

**OpenWindowForReports** PastePlotSettings **PasteReports** 

PasteReportsWithLegacyNames **PasteTraces** PasteTracesWithLegacyNames

RenameReport RenameTrace ResetPlotSettings SavePlotSettingsAsDefault SetLinkOutputTraces SetPropValue UngroupPlotCurvesInGroup **UpdateAllReports** UpdateReports

Update Traces Context And SweepsUpdateTraces

# oModule-OutputVariable

CreateOutputVariable DeleteOutputVariable DoesOutputVariableExist EditOutputVariable **ExportOutputVariables** GetOutputVariableValue GetOutputVariables ImportOutputVariables

# oModule-UserDefinedSolutionModule

CreateUserDefinedSolution DeleteUserDefinedSolutions EditUserDefinedSolution GetUserDefinedSolutionNames **GetUserDefinedSolutionProperties**