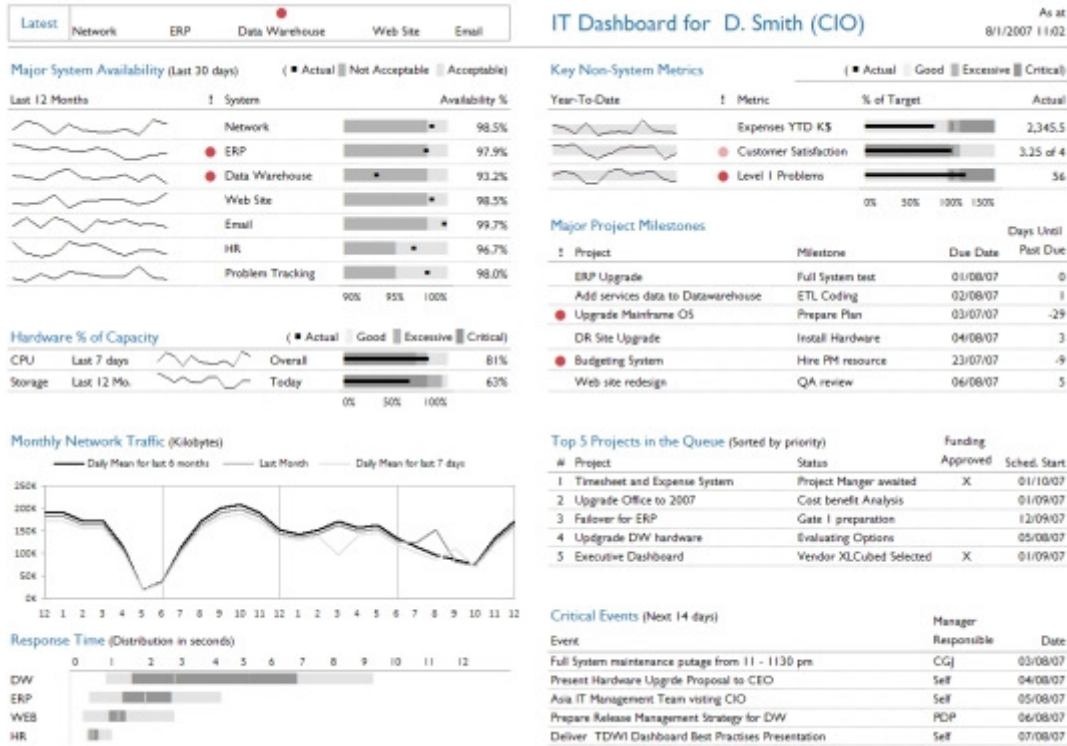


XLCubed and MicroCharts WebEdition Data Sheet

The XLCubed and MicroCharts Web Edition is True Thin client delivery of authored Excel reports for interactive dynamic content on the Web.



Dynamic, interactive Web Dashboard authored in Excel

Excel Charts and MicroCharts

Micro Chart Functions

BulletGraph	Returns a bullet graph from a range of cells.
CMicroBar	Returns a colored bar chart from a range of cells.
CmicroColumns	Returns a colored line chart from a range of cells.
CmicroIcon	Returns a colored icon chart from a range of cells.
CmicroLine	Returns a colored line chart from a range of cells.
CmicroPie	Returns a colored pie chart from a range of cells.
CmicroWinLose	Returns a colored win lose chart from a range of cells.
MicroBar	Returns a monochrome bar chart from a cell.
MicroColumns	Returns a monochrome column chart from a range of cells.
MicroLine	Returns a monochrome line chart from a range of cells.
MicroPie	Returns a monochrome pie chart from a cell.
MicroWinLose	Returns a monochrome win lose chart from a range of cells.

Excel Column Charts

Clustered Column	Compares values across categories. Shows the relationship of individual items to the whole, comparing the contribution of each value to a total across categories.
Stacked Column 100% Stacked Column	Compares the percentage each value contributes to a total across categories.

Excel Bar Charts

Clustered Bar	Compares values across categories.
Stacked Bar	Shows the relationship of individual items to the whole.
100 % Stacked Bar	Show the relationship of individual items to the whole.

Excel Line Charts

Line	Displays trends over time or categories.
Stacked Line	Displays the trend of the contribution of each value over time or categories.
100 % Stacked Line	Displays the trend of the percentage each value contributes over time or categories

Excel Area Charts

Area	Displays trends over time or categories.
Stacked Area	Displays the trend of the contribution of each value over time or categories.
100 % Stacked Area	Displays the trend of the percentage each value contributes over time or categories

Excel Pie Charts

Pie Displays the contribution of each value to a total

Excel Scatter Plot

Scatter Compares sets of two values

Bubble Compares sets of three values

Excel Stock Chart

Stock Chart Illustrate the fluctuation of stock prices

Worksheet Functions

Navigation Functions

HYPERLINK Creates a shortcut to jump to a document stored on a network server.

Creates a hyperlink that opens a sheet and set parameters. When you follow the hyperlink, XLCubed jumps to the sheet stored at linkLocation and set the parameters to at the specified parameter addresses in the target sheet.

XL3LINK

OLAP Cube Functions

XL3Lookup	Returns a cube cell value.
XL3PropertyLookup	Returns the Member Property for a member.
XL3DimensionLookup	Returns the Dimension name.
XL3RankLookup	Returns the member at the specified position of a ranking.
XL3ValueRankLookup	Returns the cell value at the specified position of a ranking.
XL3MemberLookup	Returns a caption for a member key or unique name.
XL3MemberChildLookup	Returns the specified Child for a given member.
XL3MemberLevelLookup	Returns the specified member for a given level.
XL3KpiLookup	Returns a cube cell value for a KPI.
XL3MDXDataSeries	Returns a set of cube cell values from an MDX statement.
XL3DataSeries	Returns a set of cube cell values.
XL3Calc7DayAvg	Returns MDX that is used in place of a Measure in an XL3Lookup function. Used to apply 7 day averages to measures.
XL3CalcAvgMtd	Returns an MDX string that can be used in place of a Measure for performing month to date calculations
XL3CalcAvgPeriodsToDate	Returns an MDX string that can be used in place of a Measure for performing period to date calculations, allowing a level to be specified
XL3CalcAvgYtd	Returns an MDX string that can be used in place of a Measure for performing year to date calculations
XL3CalcMaxAtLevel	Returns an MDX string that can be used in place of a Measure for determining the maximum value for a level of a Dimension
XL3CalcMinAtLevel	Returns an MDX string that can be used in place of a Measure for determining the minimum value for a level of a Dimension
XL3CalcRange	Returns an MDX string that is used in an XL3LookUp function. It is used to return a count of the measures that meet the conditions specified. The condition is in the form of (Measure) (Operation) (Min) ([Max])
XL3CalcRangeAtLevel	Returns an MDX string that is used in an XL3LookUp function. It is used to return a count of the Measure are the numerical values of interest to users. An example of a measure would be unit price or units sold. that meet the conditions specified. The condition is in the form of (Measure) (Operation) (Min) ([Max])
XL3CalcSumMtd	Returns an MDX string that can be used in place of a Measure for performing Month To Date calculations
XL3CalcSumPeriodsToDate	Returns an MDX string that can be used in place of a Measure for performing Period To Date calculations, allowing a level to be specified
XL3CalcSumYtd	Returns an MDX string that can be used in place of a Measure for performing Year To Date calculations
XL3MdxLookup	Returns the value of an MDX statement
XL3MdxMemberLookup	Returns the Member at the specified position of an MDX statement

Database and List Management Functions

DAVERAGE	Indicates the average of the values that meet the specified criteria.
DCOUNT	Counts the number of cells containing numbers that meet the specified criteria.
DCOUNTA	Counts nonblank cells containing numbers or text that meet the specified criteria.
DGET	Returns a single value that meets the specified criteria.
DMAX	Extracts the highest value that meets the specified criteria.
DMIN	Extracts the lowest value that meets the specified criteria.
DPRODUCT	Returns the product of the values that meet the specified criteria.
DSTDEV	Estimates the standard deviation of a population, based on a sample of selected entries from the database.
DSTDEVP	Returns the calculation of the standard deviation of a population, based on the sum of the whole population.
DSUM	Returns the total of the values that meet the specified criteria.
DVAR	Estimates the variance of a sample population based on the values that meet the specified criteria.
DVARP	Returns the calculation of the true variance of an entire population based on the values that meet the specified criteria.

Date and Time Functions

NOW	Returns the current date and time in the form of a serial number.
TODAY	Returns the current date as a serial number.
DATEVALUE	Converts date text to a DATEVALUE serial number.
DAY	Returns the corresponding day of the month serial number or date text from 1 to 31.
HOUR	Returns the hour as a serial number integer between 0 and 23.
MINUTE	Returns the serial number that corresponds to the minute.
MONTH	Returns the corresponding serial number of the month of a date between 1 and 12.
SECOND	Returns the seconds portion of a serial time value.
TIMEVALUE	Returns the decimal number for a given time.
YEAR	Returns the corresponding year as a serial number in the form of an integer.
WEEKDAY	Returns the corresponding day of the week as a serial number.
DAYS360	Returns the number of days between two set dates based on a 360-day year.
DATE	Returns the serial number that represents a date.
TIME	Returns the decimal value of a given time.

Financial Functions

IRR	Returns the internal rate of return for a series of cash flows represented by numbers in the form of values.
NPV	Calculates the net present value of an investment from the discount rate and several future payments and income.
MIRR	Returns a modified internal rate of return for several periodic cash flows.
SLN	Returns the straight-line depreciation on an asset.
FV	Returns the future value of an investment that makes payments as a lump sum or as a series of equal periodic payments.
NPER	Returns the total number of periods for an investment. This is based on a periodic

	constant payment and a constant interest rate.
PMT	Calculates the loan payment for a loan based on constant payments and constant interest rates.
PV	Returns the present value based on an investment.
RATE	Returns per period the interest of an annuity.
ISPMT	Calculates the interest paid during a defined period of an investment.
SYD	Based on a specified period, SYD returns the sum-of-years' digits depreciation of an asset.
DB	Returns the asset depreciation for a period using the fixed declining balance method.
DDB	Returns the asset depreciation for a period using the double-declining balance method or another specified method.
IPMT	Returns the interest for a period of time based on an investment with periodic constant payments and a constant interest rate.
PPMT	Returns the principal payment for a period of an investment based on periodic constant payments and a constant interest rate.
VDB	For a period you specify, returns the depreciation of an asset.

Information Functions

NA	An alternative representation of the error value #N/A.
ERROR.TYPE	Returns the corresponding number value associated with an error type in Microsoft Excel.
ISBLANK	Returns TRUE if the cell is empty, FALSE if it contains data.
ISERR	Returns TRUE if value contains any error value except #N/A, FALSE if it does not.
ISERROR	Returns TRUE if value contains any error value (including #N/A), FALSE if it does not.
ISLOGICAL	Returns TRUE if value is a logical value, FALSE if it is not.
ISNA	Returns TRUE if value is #N/A, FALSE if it is not.
ISNONTEXT	Returns TRUE if value is not text, FALSE if it is.
ISNUMBER	Returns TRUE if value is a number, FALSE if it is not.
ISREF	Returns TRUE if value is a reference, FALSE if it is not.
ISTEXT	Returns TRUE if value is text, FALSE if it is not.
N	Returns a value converted to a number.
TYPE	Determines the type of value in a cell.

Logical Functions

FALSE	Returns the value FALSE. May be typed directly into the cell as "FALSE".
TRUE	Returns the value TRUE. May be typed directly into the cell as "TRUE".
NOT	Returns the reverse value of its arguments; TRUE becomes FALSE and FALSE becomes TRUE.
AND	Returns TRUE if all the arguments are TRUE in the formula, and FALSE if any one argument is FALSE.
OR	Returns FALSE if all arguments are FALSE, and TRUE if at least one argument is TRUE.
IF	Returns a value if one condition is TRUE and returns another value if the condition is FALSE.

Lookup and Reference Functions

COLUMN	Returns the column number(s) based on a given reference.
ROW	Returns the row number based on a reference.
AREAS	Returns the number of areas based on a reference.
COLUMNS	Returns the number of columns based on an array or reference.
ROWS	Returns the number of rows in a reference or array.
TRANSPOSE	Returns a horizontal range of cells as vertical or vice versa.
INDIRECT	Returns the contents of a cell using its reference.
INDEX	Returns the value of an element selected by the row number and column letter indexes.
LOOKUP	Looks in the first row or column of a range or array, and returns the specified value from the same position in the last row or column of the range or array.
MATCH	Returns the relative position of an item in an array that matches a specified value in a specified order, or the position of an item.
ADDRESS	Given specified row and column numbers, creates a cell address as text.
CHOOSE	Returns an item from a list of values..
HLOOKUP	Searches for a specified value in an array or a table's top row.
VLOOKUP	Searches for a value in the leftmost column of a table and returns a value from the same row in a column number that you specify.
OFFSET	Returns a reference to a range that is a specific number of rows and columns from a cell or range of cells.

Math and Trigonometry Functions

PI	Returns the approximate number 3.14159265358979, the mathematical constant pi, accurate to 15 digits.
RAND	Returns an evenly distributed random number greater than or equal to 0 and less than 1. A new random number is returned every time the worksheet is calculated.
ABS	Returns the absolute value of a number.
ACOS	Returns the arccosine of a number in radians in the range 0 to pi.
ACOSH	Returns the inverse hyperbolic cosine of a number.
ASIN	Returns the arcsine of a number in radians in the range $-\pi/2$ to $\pi/2$.
ASINH	Returns the inverse hyperbolic sine of a number.
ATAN	Returns the arctangent of a number in radians in the range $-\pi/2$ to $\pi/2$.
ATANH	Returns the inverse hyperbolic tangent of a number.
COS	Returns the cosine of the given angle.
COSH	Returns the hyperbolic cosine of a number.
DEGREES	Converts radians into degrees.
EVEN	Returns a number rounded up to the next even integer for positive integers and rounded down to the next even integer for negative numbers.
EXP	Returns e (2.71828182845804) raised to the power of a specified number.
FACT	Returns the factorial of a number.
INT	Rounds a number down to the nearest integer.
LN	Returns the natural (base e) logarithm of a number.
LOG10	Returns the base-10 logarithm of a number.
MDETERM	Returns the matrix determinant of an array.
MINVERSE	Returns the inverse matrix for the matrix stored in an array.
ODD	Returns a number rounded up away from zero to the nearest odd integer.
RADIANS	Converts degrees to radians.
SIGN	Determines the sign of a number. Returns 1 if the value is positive, 0 if the value is 0, and -1 if the value is negative.
SIN	Returns the sine of a given angle.
SINH	Returns the hyperbolic sine of a number.
SQRT	Returns a positive square root.
TAN	Returns the tangent of the given angle.
TANH	Returns the hyperbolic tangent of a number.
LOG	Returns the logarithm of a number of the base you specify.
ROMAN	Converts an Arabic numeral to Roman, as text.
TRUNC	Truncates a number to an integer by removing the fractional part of a number.
PRODUCT	Multiplies all the numbers given as arguments and returns the product.
SUM	Adds all the numbers in a range of cells.
SUMSQ	Returns the sum of the squares of the arguments.
ATAN2	Returns the four-quadrant arctangent of the specified x- and y- coordinates in radians between $-\pi$ and π excluding $-\pi$. A positive result represents a counterclockwise angle from the x-axis, a negative result represents a clockwise angle.
CEILING	Returns a number rounded up, away from zero, to the nearest multiple of significance.
COMBIN	Returns the number of combinations for a given number of items.

FLOOR	Returns a number rounded down, toward zero, to the nearest multiple of significance.
MMULT	Returns the matrix product of two arrays. The result is an array with the same number of rows as array1 and the same number of columns as array2.
MOD	Returns the remainder of a division operation (modulus).
POWER	Returns the result of a specified number raised to a specified power.
ROUND	Round a number to a specified number of digits.
ROUNDDOWN	Rounds a number down, towards zero.
ROUNDUP	Rounds a number up, away from zero.
SUMX2MY2	Returns the sum of the difference of squares of corresponding values in two arrays.
SUMX2PY2	Returns the sum of the sum of squares of corresponding values in two arrays.
SUMXMY2	Returns the sum of squares of differences of corresponding values in two arrays.
SUMIF	Adds the cells specified by a certain criteria.
SUMPRODUCT	Multiplies corresponding components in the given arrays, and returns the sum of those products.

Statistical Functions

COUNTBLANK	Counts the empty cells in a specified range.
FISHER	Returns the Fisher transformation at x.
FISHERINV	Returns the inverse of the Fisher transformation at y.
GAMMALN	Returns the natural logarithm of the gamma function.
NORMSDIST	Returns the standard normal cumulative distribution function.
NORMSINV	Returns the inverse of the standard normal cumulative distribution function.
GROWTH	Calculates predicted exponential growth by using existing data.
LINEST	Calculates a straight line that best fits your data using the least squares method. Calculates an exponential curve that fits your data and returns an array of values that describes the curve.
LOGEST	
TREND	Returns the y-values along a linear trendline that best fits the values in a data set.
AVEDEV	Returns the average of the absolute deviations of data points from their mean.
AVERAGE	Returns the average of its arguments.
AVERAGEA	Returns the average of the values in its list of arguments including text and logical values.
COUNT	Counts the number of cells that contain numbers (including dates and formulas that evaluate to numbers) within the list of arguments.
COUNTA	Counts the number of cells that are not empty.
DEVSQ	Returns the sum of the squares of deviations of a data set from their sample mean.
GEOMEAN	Returns the geometric mean of an array or range of positive data.
HARMEAN	Returns the harmonic mean of a data set.
KURT	Returns the Kurtosis of a data set.
MAX	Returns the largest value in a set of values.
MAXA	Returns the largest value in a set of values including text and logical values.
MEDIAN	Returns the median of the given numbers.
MIN	Returns the smallest value in a set of values.
MINA	Returns the smallest value in a set of values including text and logical values.

MODE	Returns the most frequently occurring, or repetitive, number in an array or range of data.
SKEW	Returns the skew of a distribution.
STDEV	Estimates standard deviation based on a sample.
STDEVA	Estimates standard deviation based on a sample. Includes text and logical values.
STDEVP	Estimates standard deviation based on a sample assuming that the arguments represent the total population.
STDEVPA	Estimates standard deviation based on a sample assuming that the arguments represent the total population. Includes text and logical values.
VAR	Returns an estimate for the variance of a population based on a sample data set.
VARA	Returns an estimate for the variance of a population based on a sample data set and may include text or logical values.
VARP	Calculates variance based on the entire population.
VARPA	Calculates variance based on the entire population and may include text or logical values.
CHIDIST	Returns the one-tailed probability of the chi-squared (X^2) distribution; the area in the right tail under the chi-squared distribution curve.
CHIINV	Returns the inverse of the one-tailed probability of the chi-squared (X^2) distribution.
CHITEST	Returns the test for independence of the characteristics in a table.
CORREL	Returns the correlation coefficient between two data sets.
COUNTIF	Counts the number of cells in a range that meet a given criteria.
COVAR	Returns the covariance, the average of products of deviations, for each data point pair.
FREQUENCY	Calculates how often values occur within a range of values and then returns a vertical array of numbers.
FTEST	Returns the result of an F-test.
INTERCEPT	Calculates the point at which a line will intersect the y-axis by using existing x and y values.
LARGE	Returns the k-th largest value in a data set.
PEARSON	Returns the Pearson product moment correlation coefficient, r, a dimensionless index that ranges from -1.0 to 1.0 inclusive and reflects the extent of a linear relationship between two data sets.
PERCENTILE	Returns the k-th percentile of values in a range.
PERMUT	Returns the number of permutations for a given number of objects that can be selected from a range of numbers.
QUARTILE	Returns the quartile of a data set.
RSQ	Returns the r^2 value of a linear regression line.
SLOPE	Returns the slope of a regression line through data points in KNOWN_Y'S and KNOWN_X'S.
SMALL	Returns the k-th smallest value in a data set.
STEYX	Returns the standard error of the predicted y value for each x in the regression.
TINV	Returns the t-value of the Student's t-distribution as a function of the probability and the degrees of freedom.
TRIMMEAN	Returns the mean of the interior of a data set.
PERCENTRANK	Returns the rank of a value in a data set set as a percentage of the data set.
RANK	Returns the rank of a number in a list of numbers.
ZTEST	Returns the two-tailed P-value of a z-test.
CONFIDENCE	Returns the confidence interval for a population mean.
CRITBINOM	Returns the minimum number yields a binomial distribution less than or equal to the specified criteria

EXPONDIST	Returns the exponential distribution.
FDIST	Returns the F probability distribution.
FINV	Returns the inverse of the F probability distribution.
FORECAST	Calculates or predicts a future value by using existing values.
GAMMAINV	Returns the inverse of the gamma cumulative distribution.
LOGINV	Returns the inverse of the lognormal cumulative distribution function of x, where $\ln(x)$ is normally distributed with parameters mean and standard deviation.
LOGNORMDIST	Returns the cumulative lognormal distribution of x, where $\ln(x)$ is normally distributed with parameters mean and standard deviation.
NEGBINOMDIST	Returns the negative binomial distribution.
NORMINV	Returns the inverse of the normal cumulative distribution for the specified mean and standard deviation.
POISSON	Returns the Poisson distribution.
STANDARDIZE	Returns a normalized value from a distribution characterized by MEAN and STANDARD_DEV.
TDIST	Returns the percentage points (probability) for the student t-distribution, where a numeric value (x) is a calculated value of t for which the percentage points are to be computed.
PROB	Returns the probability that values in a range are between two specified limits.
BETADIST	Returns the cumulative beta probability density function.
BETAINV	Returns the inverse of the cumulative beta probability density function.
BINOMDIST	Returns the individual term binomial distribution probability.
GAMMADIST	Returns the gamma distribution.
HYPGEOMDIST	Returns the hypergeometric distribution.
NORMDIST	Returns the normal cumulative distribution for the specified mean and standard deviation.
TTEST	The probability associated with t-test.
WEIBULL	Returns the Weibull distribution.

Text Functions

CHAR	Returns the character specified by a number.
CLEAN	Removes all nonprintable characters from text.
CODE	Returns a numeric code from the first character in a text string. The opposite of the CHAR function.
LEN	Returns the number of characters in a text string.
LENB	Returns the number of characters in a text string expressed in bytes.
LOWER	Converts all letters in a text string to lowercase.
PROPER	Capitalizes the first letter of each word in a text string or sentence.
T	Returns the text referred to by a value.
TRIM	Removes all spaces from text except single spaces between words.
UPPER	Converts text to uppercase.
VALUE	Converts a text string that represents a number to a number.
DOLLAR	Converts a number to text using Currency format, with the decimals rounded to the specified place.

USDOLLAR	Converts a number to text using US Dollar format, with the decimals rounded to the specified place.
LEFT	Returns the first character(s) in a text string.
LEFTB	Returns the first character(s) in a text string based on a specified number of bytes
RIGHT	Returns the last character(s) in a text string.
RIGHTB	Returns the last character(s) in a text string based on a specified number of bytes.
FIXED	Rounds a number to a specified number of decimals, formats the number in decimal format using a period and commas, and returns the result as text.
CONCATENATE	Joins several text strings into one text string.
EXACT	Compares two text strings and returns TRUE if they are exactly the same, and FALSE otherwise.
REPT	Repeats specified text a given number of times.
TEXT	Converts a value to text in a specific number format.
FIND	Locates one text string within another text string, and returns the number of the starting position of FIND_TEXT from the leftmost character of WITHIN_TEXT.
FINDB	Returns the position of specified text within another specified text string based on the number of bytes each character uses from the first character of WITHIN_TEXT.
SEARCH	Returns the number of the character at which a specific character or text string is first found, reading from left to right.
SEARCHB	Returns the number of the character at which a specific character or text string is first found in bytes, reading from left to right.
MID	Returns a specific number of characters from a text string starting at the position you specify.
MIDB	Returns a group of characters based on a specified number of bytes from a text string starting at the position you specify.
SUBSTITUTE	Substitutes NEW_TEXT for OLD_TEXT in a string.
REPLACE	Replaces part of a text string with a different text string based on the number of characters you specify.
REPLACEB	Replaces part of a text string with a different text string based on the number of characters you specify in terms of bytes.

Supported Controls and Navigation

Controls

- Data validation Lists
- Forms Combo Boxes
- Control Toolbox Combo Boxes

Navigation

- Hyperlinks for sheet navigation
- HYPERLINK function for dynamic sheet navigation
- XL3LINK function for hyperlink data dynamic hyperlinks

System Requirements

XLcubed Excel Edition

- Microsoft Windows 2000 with Service Pack 3 (SP3), Windows XP, or later
- Microsoft Excel 2000 or higher
- Microsoft .NET Framework version 2.0
- Microsoft Analysis Services
 - Version 2000 with Service Pack 4 (SP4), or
 - Version 2005 with Service Pack 2 (SP2)
- Intel Pentium 4 or faster processor
- 500 megabytes (MB) of RAM or greater
- 50 MB of available hard-disk space

XLcubed / BonaVista MicroCharts

- Microsoft Windows 2000 with Service Pack 3 (SP3), Windows XP, or later
- Microsoft Excel 2000 or higher
- Microsoft .NET Framework version 2.0
- Intel Pentium 4 or faster processor
- 500 megabytes (MB) of RAM or greater
- 15 MB of available hard-disk space

XLcubed Web Edition Server

- Microsoft Internet Information Server
 - Version 5.1, Windows XP Professional, or
 - Version 6.0, Windows Server 2003 and Windows XP Professional x64 Edition, or
 - Version 7.0, Windows Vista and Windows Server 2008
- Microsoft Analysis Services
 - Version 2000 with Service Pack 3 (SP3), or
 - Version 2005 with Service Pack 2 (SP2)
- Microsoft .NET Framework version 2.0
- Intel Pentium 4 or faster for 32-bit (x86) or a 64-bit (x64) processor

- 2 gigabytes (GB) of RAM or greater
- 20 MB of available hard-disk space

XLCubed Web Edition Client

- Microsoft Internet Explorer 5.5 or higher