.cvx file (Convexity file)

The .cvx format is Convexity's binary format. It saves almost every area of 3ds max® or Viz® and is cross platform compatible which means for example you can open a .cvx file which was saved in max 9 in max 5 or even Viz 2005 etc. (providing Convexity is installed on those applications).

You can save your standard 3ds max® or Viz® scenes to this format and share them easily with any Convexity user.

Feature:	Can be saved.
Convexity's structural objects i.e. walls, library shapes, floors and plan lines.	Yes
Meshes	Yes
Splines	Yes
Patches	Yes (Load back as surfaced splines)
Nurbs	Yes (Relational data is not saved)
Modifiers	Yes (Advanced modifiers such as Skin and Morpher are not saved fully. Modifiers that have been applied to more than one object load back as a unique modifier on each object and so do not always come back correctly. Modifiers which are not fully accessible through maxscript are not fully saved for example the 'Surface' modifiers 'Flip Normals', 'Remove Interior patches' and 'Use Only Selected Segs' properties are not savable. If you are using the 'Surface' modifier then apply a standard 'Normal' Modifier to flip the normals, if required, as it can be saved.)
Particle systems	Yes
Spacewarps	Yes

Materials	Yes (Certain non-maxscript accessible materials and textures are not saved fully e.g. Gradient Ramp).
Editable Polys	Yes
Primitives	Yes
Lights	Yes
Cameras	Yes
XRef Objects and scenes	Yes
Layers	Yes
Groups	Yes
Hierarchy i.e. parent-child relations.	Yes
Bones	Yes
Selection Sets	Yes
Color per vertex data	Yes
Rendering settings	Yes (Settings for the default scan-line renderer are saved, other rendering plugins may not be saved.)
Radiosity settings	Yes (Radiosity solutions are not saved)
System units	Yes
All plugin objects that are fully accessible through the maxscript 'getpropnames' and 'setProperty' functions and which are creatable by calling their class name.	Yes
Viewport layout	Partial, view types are saved. Viewport rendering methods i.e. wireframe, shaded etc. are saved in max 7 and up only.
Animations	No
Rendering Effects	No
Bipeds	No
Instances and References	No (Instanced and referenced objects load back as a set of unique objects)
Compound Objects	No. (Terrains, lofts and booleans are saved as editable meshes)

Advantages	Disadvantages
Cross platform compatible. i.e. same file can open in max 5-9 and viz 2004-2008. This allows for team members to use viz as an alternative to max for making levels, thus saving money.	Does not save all areas of max or viz.
Smaller files, better for giving out over the internet and emailing to colleagues.	Slower to save and load than a .max file.
Can be merged with structural data intact.	

Additional details

Since editable mesh objects can be saved, it is possible to save any object to the .cvx format provided you convert it to an editable mesh first.

Objects, modifiers and materials etc. which are in one version of max or viz but not in an older version, will not load in the old max or viz version. To pass new objects back try converting them to an editable mesh before saving. For example the AEC Extended objects of max 6 will not load in max 5, but if you convert them to meshes before saving they will load.

Files are always smaller than their .max equivalent.