

# VirtualBox Usage and Configuration

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## **Abstract**

The configuration and scripting of VirtualBox machines to start/stop and take backups.

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## List of Definitions and Abbreviations

- MOA - Municipality of Anchorage

# Introduction

'VirtualBox is a powerful x86 and AMD64/Intel64 [virtualization](#) product for enterprise as well as home use. Not only is VirtualBox an extremely feature rich, high performance product for enterprise customers, it is also the only professional solution that is freely available as Open Source Software under the terms of the GNU General Public License (GPL) version 2. See "[About VirtualBox](#)" for an introduction.

Presently, VirtualBox runs on Windows, Linux, Macintosh, and Solaris hosts and supports a large number of [guest operating systems](#) including but not limited to Windows (NT 4.0, 2000, XP, Server 2003, Vista, Windows 7, Windows 8, Windows 10), DOS/Windows 3.x, Linux (2.4, 2.6, 3.x and 4.x), Solaris and OpenSolaris, OS/2, and OpenBSD.

VirtualBox is being actively developed with frequent releases and has an ever growing list of features, supported guest operating systems and platforms it runs on. VirtualBox is a community effort backed by a dedicated company: everyone is encouraged to contribute while Oracle ensures the product always meets professional quality criteria.'

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<sup>1</sup>VirtualBox: <https://www.virtualbox.org/>

## Questions

- Break table column over two rows?

## Examples

Series of useful L<sup>A</sup>T<sub>E</sub>X markup. Need to break out to separate examples.tex file.

## Escaping < and > Symbols

To get \$<\$ or \$>\$ just wrap the symbols in \$ for math mode.

## Enumerate

1. DNR - Alaska State Department of Natural Resources
  - HI - Historical Index, not maintained since 1982
  - LE - Land Estate, maintained by SGU
  - ME - Mineral Estate, maintaind by SGU
2. Alaska State Surveys
  - ASBLT - As-Built Survey
  - ASCS - Cadastral Survey

## Comments

**COMMENTS** Comment — *Sean Weems, Spring 2003*

We should get the **COMMENTS** column searchable via the landrecords application before we do much anything else – shouldn't be too hard.

*Errata: Plats spanning multiple sections*

A few anomalies can be observed in the **AKPLATS** table. Specifically plats exist that span multiple sections. Since the table only has a single column, **SCODE**, that accepts a single section code, SGU (Status Graphics Unit) has handled this problem by entering multiple rows in the table, each with a different section that point to the same plat or file. Multiple section plats are indicated by setting the **TCODE** column to the value 37, and making an appropriate notation like *Section 24-25-26-27* in the **REMARKS** column.

[FIXME: Perhaps the **SCODE** column should accept an array of sections?]

## Footnotes

See my footnote<sup>2</sup> generated with:

```
\footnote{\href{http://www.google.com/search?q=latex+footnotes}
{Search google for footnotes.}}
```

GoogleGuide — Linking to Search Results.<sup>3</sup>

## Hyperlinks

Use `\href{}` to generate hyperlinks:

```
\href{http://www.google.com}{Google}}
```

Yields: [Google](http://www.google.com)

## Table Examples

Column Name	Type	Description
EQS	VARCHAR2(1)	!NULL map shows village selections
ITM_COL	VARCHAR2(1)	USGS ITM column: 1-6
ITM_ROW	VARCHAR2(1)	USGS ITM row: A-E
QMQ_ABBR_DNR	VARCHAR2(3)	Three character DNR abbreviation for the QMQ
RASTER_FILENAME	VARCHAR2(50)	Physical path to file
RASTER_PATHNAME	VARCHAR2(50)	URL path to PDF of map
SCODE	VARCHAR2(2)	Supplement map code: 1,2,3,...
COMMENTS	VARCHAR2(256)	Plat comments

Table 1: EASEMENTS\_17B Table

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<sup>2</sup>[Search](#) google for footnotes.

<sup>3</sup>GoogleGuide — [Linking to Search Results](#).



XML element	Description
FNUM	US Survey file number
MERIDIAN	BLM meridian code 12 = Copper River 13 = Fairbanks 28 = Seward 44 = Kateel 45 = Umiat
TOWNSHIP	Five character Township code
RANGE	Five character Range code
PAGE	Survey page number 1,2,3,...
FILENAME	Relative path to file in direcorey

Table 2: USS XML index elements

col 1	col 2	col 3	col 4
item 1	item 2	item 3	item 4
item 1	item 2	item 3	item 4

Table 3: Demo

Virtual Machine	Apache	ELM	LM	Elluminate Server
dcs-elive-prod01		x	x	x
uaa-elive-dev01	x	x	x	
uaa-elive-server01				x
uaa-elive-prod01		x	x	x
uaf-elive-prod01		x	x	x
uas-elive-prod01		x	x	x

Table 4: Daemons

Column Name	Type	Description
MTR	VARCHAR2(9)	Meridian, Township, Range, example: <i>C026S054E</i>
QMQ	VARCHAR2(3)	Quarter Million Quadrangle code, example: <i>DIL</i> (Dillingham quadrangle)

Table 5: XREF\_MTR\_QMQ Table

## Verbatim

“The verbatim environment is a paragraph-making environment that gets  $\text{\LaTeX}$  to print exactly what you type in. It turns  $\text{\LaTeX}$  into a typewriter with carriage returns and blanks having the same effect that they would on a typewriter.”<sup>4</sup>

```
\begin{verbatim}  
    text  
\end{verbatim}
```

### Figure formatting with verbatim

The following figure leverages verbatim for proper formatting:

```

gis/raster/
  dnr/
    map_library/
      plats/
        SP/YYYYMMDD/*.pdf          # indexed
        HI/YYYYMMDD/*.pdf          # Indexed
        ASLS/YYYYMMDD/*.pdf        # Indexed
      recorded-plats/
        YYYYMMDD/*.pdf
  blm/
    easements_17b/YYYYMMDD/*.pdf  # indexed
    mtp/YYYYMMDD/*.pdf             # non-indexed
    usrs/YYYYMMDD/*.pdf            # indexed
    usrs-notes/YYYYMMDD/*.pdf      # indexed
    uss/YYYYMMDD/*.pdf             # indexed
    uss-notes/YYYYMMDD/*.pdf       # indexed
    usms/YYYYMMDD/*.pdf            # indexed
    usms-notes/YYYYMMDD/*.pdf      # indexed
  usgs/
    drg/
      collared/
        250K/
        63K/
        25K/
        24/
      decollared/
      tools/
      missing\_data/
    dem/
    doq/
    topo/

```

Figure 1: File and Directory Structure

## Endnotes

1.  $\text{\LaTeX}$  verbatim  
<http://www.kfunigraz.ac.at/binder/texhelp/ltx-79.html>

# Appendix

A Guide to L<sup>A</sup>T<sub>E</sub>X

<http://www.astro.rug.nl/~kuijken/latex.html>

L<sup>A</sup>T<sub>E</sub>X - From Wikibooks, the open-content textbooks collection

<http://en.wikibooks.org/wiki/LaTeX>

L<sup>A</sup>T<sub>E</sub>X Notes

[http://luke.breuer.com/time/item/LaTeX\\_Notes/180.aspx](http://luke.breuer.com/time/item/LaTeX_Notes/180.aspx)