Description	Properties MNEMONIC: Definition	Notes 5ma	x neovim emacs in	rssi weechat fish	Ginthells suppretion	It just seems import	ent						
		256 colors High pri Find ubiquitous, but I think its ubiquitous these days. CSI 38NH 5.5N m where N is 0-255. Sah says they would use it, though. Ferminate willous 256 color support per https://fedoraproject.org/wist/seatures/256_Color_Terminate: Input visual console ("recovinfs tal.c says this was fixed in Linux 4.6) ###################################											
		Innax virtual console ("neovinite tui, c says this was fixed in Linux 4.6) 10250											
		four virtual console ("neevinit tal.c says this was fixed in Linux 4.6) m2520 10220 10220 102000 10200 10200 10200 10200 10200 10200 10200 10200 102000 10200 10200 10200 10200 10200 10200 10200 10200 1020											
		34 bit color											
	MET COMPAT Backets	34 bit color Spec says: CSI 362 (point space) (red) (green) (bias) (unused) (bierance) (bierance colongace) in These forms may be found in the wall!											
	24BIT_COMPAT: Boolean CSI 38.2(red)(green)(blue) m CSI 48.2(red)(green)(blue) m	These forms may be found in the self: CE 2004 (2) and [green] (blue] [assed] (blue) [assed] (bl											
	2NET_FULL: Boolean CSI No.2(crimpace) [and] (green) (blue) - more paramer in CSI No.2(crimpace) [and] (green) (blue) - more paramer in The - more paramer in present induced by ignored or implemented according to TTU 1-16-16/2022.	CSI 38462 (colorspace) (md) (green) (blue) m CSI 38462 (colorspace) (md) (green) (blue) -extra ignored args- m											
	The «more paramix», if present, should be ignored or implemented according to ITU T.416-199303.	Some terminals still do not support: Lef's go with semicolons in the short form for them, and colons for the long form. TODO: Investigate if this will actually work.											
Color capabilities	256 colors is assumed if you support feature reporting at all. In 256 color mode, colors may be immutable. Prefer 24 bit color instead of changing the palette.	See a list https://gist.github.com/teckholl/23a4-bbf/08f52a2bbd/1affds00316f https://github.com/neovim/seev											
	256 colors is assumed if you support feature reporting at all. In 256 color mode, colors may be immutable. Prefer 24 bit color instead of Changing the patiest. CLPBCARD_WRITABLE: Boolean Cpt. (2)(45) -ease(4-data-y places decoded -base(4-data-on primary cip)color. It beself-data is empty or invalid base-64	Should we have a separate flag for read vs write? Any security implications to advertising clipboard reading? Consider high pri because it is expensive when sending a lot of data to clipboard.											
CSC 52 (clipboard access) DECSLRM (set left right margins) & DECLRMM (enable left-right margins)	primary clipboand. If base64-data is empty or invalid base-64 bytes, the clipboand is cleared. DECSLIMI: Boolean Exact specs TSD based on exclest. There are a lot of them.												
		Terminals implement any combination of these:											
		IDCSET 1000 — VT200, MOUSE IDCSET 1001 — IDTS IDCSET MOUSE IDCSET 1001 — IDTS IDCSET MOUSE											
		CICCEST 1002 — ANY LOVINT MOUSE I/ DISCEST 1004 — ENY MOUSE (See Sous reporting elsewhere DOPSET 1004 — ENY MOUSE (MOUSE) DOPSET 1005 — ENY MOUSE (MOUSE)											
	Proposal: MOUSE BASIC: Boolean	Walling State (1997) The Application of Transition of Transition (1997) The Application of Transition (1997) The Application (1997) The A											
	Proposal: MOUSE_BASIC: Boolean DECSET 1000, 1002, 1003, 1006 supported. TODO: Define this more precisely.	Pationals: Modes 9, 1005, and 1015 are all strictly inferior to other modes. We should push people away from these standards.											
SGR messe and the other mouse options	MOVES CROULL: Boolean DECSET 1007 supported. TOOD. Define this more precisely UNICODE_BASIC: Boolean False: No guarantees. Maybe no Unicode support at all, maybe part ACCI. True Accopit UTF-4. Renders https://pastebbs. com/staw1607-6126/2 like https:// is regurzon/FeMYmJJ png with	Additional. Notify, and 1955, are all strictly lefector to other modes. We should push people away from these standards. Notices 0, 1905, and 1955 have any useful freams like a prima facilit bad cless, but maybe therein a user case i'm unawater of, 1907 is useful, but it's quite different from 1900-6.											
	False: No guarantees. Maybe no Unicode support at all, maybe just ASCII. True: Accepts UTF-6. Renders https://pastebin.												
	com/switi0HCsEc2 like https://i.imgui.com/FeH/YmJJ.png with respect to the number of extended grapheme clusters and their widths. The exact glophs that are drawn are not important, and can be replaced with combining marks if the fort does not have there.	Late of clid & bustled feminals fall to have UTF-8 support but might claim it in LANG. Per niom: linux*, vt100 and the other vt, seek, poccor*, seek, color, cytic permised as may feede, wen't, port*, const. One or has of these have a liny claim cell depoils give seek portionate in size consists).											
UTF-6 support is "good"	can be replaced with combining marks if the font does not have them.												
	DECSCUSR: Boolean	This is throughly requested (per nicm and teathwill; mostly apps want to know which options they have available for LK purpose. Per the nost-guide some terminals decode at incorrectly, printing part of the control sequence. Report by our apport below, moletiles, but: I don't think we need to worry about blesking? TODO: Are there further extensions to consider?											
	DECSCUSR: Boolean Is DECSCUSR supported for block and underline cursor? Billinking variants are not required to actually blink. DECSCUSR: BAR: Boolean	extensions to consider? TODDC (RNJ screen seems to do something funny here. See neovin's tuic comment about SelSe using DCS. TODDC A comment in tuic suggests thrux and screen do this differently.											
DECSCUSR (cursor shape) — CSI p SP q	DECSCUSR SAR: Boolean Will DECSCUSR SAS set the cursor to a baráblinking bar? AMBIGUOUS, FULLWOTH: Boolean Will artibiguous width characters per east asian widths be fallwidth? Depends on the reported unicode vension.	UDDAY A contineer in this chappens that and access no has deminently. Before considers this high pri. I think it's pretty straightforward: how many cells does the cursor advance when a character in east salan widths marked as ambiguous is printed?											
Ambiguous is fullwidth	fullwidth? Depends on the reported unicode version. UNICODE_VERSION: uint_4												
Unicode version	www.unisgned integer, in u, no or unspecified unloade support. If 1, unloade version is 8 or less. If 2 or greater, add 7 to get the unloade version supported. If equal to 15, then unloade version more than or equal to 22.	This talk you which emp) are safe to use. It's not a complete answer to exceldib problems, but it will solve a number of a pocleme, it is not supply price to the complete answer to excell the control of the defined without it.											
- All William													
		For terminith and querying fleatures, I think we should be able to report optional sub-fleatures, conformance level, and fleate estimating this report which remains of this spec is supported. Either as parameters somethor, or each as a new fleature.											
RTLIBIDI		https://herminal-wg.pages.freedesktop.org/bid/future-improvement-ideas/feature-reporting.html A conforming implementation would support:											
	TITLE_SETTING: Bicolean Conforms to stern's definition of: CSI 221 — season's definition of: CSI 221 — seasons files on stack CSI 221 — seasons files from stack CSI 22 — seasons files from stack CSI 20— seas standard & cons file CSI 20— seas standard siles CSI 20— seas standard sil	https://lemninal-up_pages.handesktop.org/bid/future-improvement-ideas.fisalure-reporting.html A molforming-implementation avoid resport. CDI 211—remote his fine state. CDI 211—remote his fine state. CDI 211—remote his fine state. CDI 212—remote his fine state. CDI 213—remote his fine state. CDI 213—remote his fine state.											
	CSI 23 t — restore title from stack CSC 0 — set window & icon title CSC 1 — set icon label	OSC 2 — set window title Will could specify a set of excisest tests to pass, but terminals should have freedom to define "icon title" in some responsable set.											
Title setting & stack	OSC 2 — set window title TODO: Find exclusis for these.	test could specially a rest of the second sec											
bracketed paste (DECSET 2004)	TOOO: Find excitation for these. BRACKTED PASTE: Boolean DECSET 2006 controls whether pastes are profixed with "ESC! 0.0 - and sufficed with "ESC! 2.0 1 FOCUS, BEDDORTHING: Boolean Decost 1004 commits whether keyboard focus gained causes the summit on specific 251 and focus lest specific CSI.	2											
focus reporting (DECSET 1004)	POCUS_REPORTING: Boolean Decart 1004 controls whether keyboard focus gained causes the terminal to report CSI I and focus lost reports CSI O												
OSC 7 (owd)	OSC 7; file://hxx indicates the current directory. The terminal												
	SGR 4:3 turns on underlining and sets underline style to "curly".												
	"straight". SGR 4 is a synonym for SGR 4:1	Some terminals accopt a subparameter for underline myle, like SGR 4.1. Kity has a bunch here https://ex.kovidgopsi. nektivpycotoci-ektivationa tettor. The set underline Style SGR (EZ-rg 1), but fin not auses of any terminals that implement it, SGR 50 results the underline cold. Children of SGR (EZ-rg 1), but fin not auses of any terminals that implement it. SGR 50 results the underline cold. Children of SGR (EZ-rg 1), but fin not auses of any terminals implement it. There's alway) SGR 25 for 400de underline. More collect here impartiples composite and here's collection of the SGR 200de underline. More collection here impartiples composite and here's collection of the SGR 200de underline.											
underline order and colours (SGR-4 and SI)	NOTE: nion suggests making this "agr 4 has subparams" rather than "agr 4.3 is supported". Waiting for more input before committing.	underline color. Dotted and dashed support shouldn't be added until two terminals implement it. There's already SGR 21 for double underline. More context here: https://gittab.com/grachman/term/2-fasuses/6362											
mikethoogh (SGR 9)	STRIKETHROUGH: Boolean SGR 9 enables at Matheways test style Note: strikethrough can consist with underline.												
onatine (SGR 53)	convaling Oxfolie Boolean SGR or enables which was but style SGR or enables which was the style OVER.IMC Boolean STACC Solean STACC Solean Conforms to https://gitalb.fre-doesdop.org/berninal- weipspecification-inverse_requested*												
synchronized updates (DCS =1 and =2)	contorns to reps rights treesescop organizaria- wg/specifications/-inerge_requests/2												
OSC 8 (hyperlinks)	NYPER INKS: Boolean Conforms to the light of this conversation and the Chember of	https://gist.gihub.com/ingmontkobieb114294etbcdSadb1944cHClcdSdds Do we need to indicate whether hover (and therefore id+) is supported? I'm learning against it.											
Coc II (hyperino)	NOTIFICATIONS: Boolean	In ITem2, the spec is: "(EMBessage content goes here*G Other terminals may have variants? This one is unfortunately impossible to extend.											
OSC 9 (notifications)	coc. Whestage causes mestage to be depayed as a user notification in a platform-defined way. SWEL: Boolean	Other terminals may have varianter / Inst one is unrorustately impossible to extend.											
Sizel	NOTEFICATIONS: Boolean CSC Symexage causes insessage to be displayed as a user CSC Symexage causes in session of SSC Section (SSC Section S	its dev reported that his server lacks a timus terminio so italics broke. They call this out as an example of a newish control sequence that still coesn't work right after five years.											
Italics Low priority		control sequence that an ocean't work right after two years.								_			
	GOC_MOST_CELLS: Decisions If then, then the command shows 4 cells with a green landsground prior's accordate/arrivo3(percos)(44mr03)(4Ccos)(bNcos)(bm/or of should show some green												
Can change background color of a subrange unset cells	of should show some green	This seems to be just a Terminal app bug. Can bump priority if we find another terminal with this problem.											
DECFRA (Si rectangle)		Cart change coin to default by coin. Consider adding an extension in the future? SGR 3/23 is revenue video instead of 7/27. DECSET 5 unavailable. Control sequences to pass through must be evapped with DCS & ESC doubled up, thrux uses DCS thrux; while acreen uses just DCS, acreen may require											
is screen/troux-like		This seem is beyiet? Intrinsic app as, Carbonop shortly in the Careford invented with the problem. Contributing class or seeding spice. Contributing class contribution is contributed by the contribution of the Careford in											
DEC Locator		The nost-guide states that only stem supports DECSER and DECSEE, and that other terminals handle it incorrectly. Is there marked demand for DEC locator? It books like it gives pixel accurate mouse reporting. Neat The nost-guide claims that only stem supports DECSELS (set number of lines) and that others use DECSEP (which											
DECSNLS (CSI * ()		has well behavior for parameters between 0-24) Ther nosh guide states that only whem supports REP. This isn't true because newer versions of l'Tern2 have it. I bet there are discrepancies around how terminals deal with multibyte UTF-8 & combining marks and REP. Consider											
REP		because it is differ in its. This country provides by an indight legal, on the raise in theirs, their wangs CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC											
DECSTR DECSCPP		The nost-guide claims that only olem-understands DECSTR. Really?? Moving this to low priority because it's probably not a good date to use unless you've 'clear'. Reminish realizing' advocatage, is consisting that low-priority. Variation selector 16 can change the width of a character it combines with. U+2764 U+FDGF is fall-width, while U+2764											
VS16 Unprioritized		is harwidn, it's not clear exactly now terminals should dear with this, so it's hard to spec a testure hag for it.											
nismy's abresse escape sequence (SM 7727) Other inline image sequences (Term2, kitty,		https://io/thub.com/minths/self-files Not sure how to do this willoud prolestiging certain terminals, teathfield suggests only adding flags for features with at least 2 terminals supporting it, which makes series to me.											
mistry's alternate escape sequence (SM 7727) Other inline image sequences (Flemt2, kity, Teletronic, ARDS, SUPCUP, RFC 746, REGIS) CSI 7 6 n (DECXCPR — report cursor position)		testabell uses this because CPR's report could be confused with a keystroke (which keystroke?)											
Has powerine glyphs Supports invisible attribute		The actual definition of powerine glights is rather slippery, and firm not sure it's ethical to support their use, but I think it would make a lot of people happy.											
CSC 50 Resize window — CSI 8:p1:p2:t		Looks like VTE does some fancy things with CSC 50 beyond sterrris definition.											
OSC 12/12 (cursor color) APC vs OSC, BEL vs ST		neovim makes this distinction, which seems to be related to truck and screen. What does truck do with APC that others do with GSC?											
CTC HPA DECSTEC		The nost business states that CTC (CSI W) is only supported by sterm (but it's not documented in clisequi and that others require TSC-HTS. The nost business states that HSA (CSI) is only supported by sterm and that others require CHA (CSI G) Sets a tubulop every 8 characters. Not sure anyone cases. Mentioned by nosh guide.											
DECSTEC DECNKM (application keyped)		This nating quase assess that row (CLS) is alony supportine by seem and that others insquire CHA (CLS) by Sets a tabeling revery it characters. Not sure anyone cross. Mentioned by nonth guide. The nosh guide claims Pully dosen't support this, and you have to use DECKPRAM and DECKPRAM. First ways that "first" set is broken on maceo for sitems "Sedicals", cold new SGR 2 is intermined for anything remotely that you have some some properties.											
SGR 2 (fairs)													
Line drawing alternate-charset		TROSEN. 1. Can you selich to alternate character set 09 Similar to https://invisible-infand.net/ncurses/han/incurses/lik/h99-3-NCUESES_NO_UTFU_ACS 2. Are lind drawing duraction always namow, or are they ambiguous width? VTE, mintly, alsoriby, and lifemi2 (nightly as of \$14.0200) support this feature											
DECSCUSR 0	RESET_CURSOR: Boolean Dose DECSICUSR 0 set the cursor to its (possibly user- configured) default value?	It would be nice to necromance this bug when this is eventually resolved: <a 52";="" actually="" chris-17.<="" easy="" href="https://doi.org/10.1001/j.jub.40.00010.00000000000000000000000000000</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></tr><tr><th>DECROSS SGR</th><th></th><th>Not all terminals support DECROSS. Some don't even parse the sequence correctly, causing some of it to be printed.
Reporting cursor shape is useful since it or otherwise unknowable until you change it. SCR reporting seems of dublous
value—Paul uses it to self 125 color setting under, but that seems les a hack that this apec cuglit to obtain.</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></tr><tr><th></th><th>ZWJ: Boolean
Zero-width joiners are supported for Emoji.</th><th>The intering local carginars - addresses and a contract of the properties of the pro</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></tr><tr><th>Zero-width joiner</th><th>In the future we may add more flags for zwj support outside</th><th>scripts: (HcBB/2xt appendix a 2) i'm sure there are more terminals with good Emoji support than good Devanagari
support.
More contact here: https://github.com/fath-shell/fath-shell/suses/2652</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></tr><tr><th></th><th>TODO: we need a test suite. I've asked Paul if he can provide
something.</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></tr><tr><th></th><th>CSLU: Boolean Will septrake be reported using the CSI u protocol? CSLU_XMULABLE: Boolean Will CSI > 4 : X m enable/disable/reset CSI u (for x=16/unset), and CSI > (g) nesset it to default?</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></tr><tr><th>CSIu</th><th>Will CSI > 4 : X m enable/disable/reset CSI u (for x=1/6/unset),
and CSI > [4] n reset it to defaults?</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></tr><tr><th></th><th></th><th>Number of trustices says. Hernito convention is to fill the M* capabilities by listing all the unmodified function keys, then all the Shith-modified keys, then all the Combi-modified keys, etc. until all G2 capabilities are full. If an application assumes 12 function keys, and numes reports a keypress of " it's="" out="" protly="" squee="" th="" that's="" to=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th>											
		Lichtungeley, ERVT-family terminals do not support 12 function keys, they support 10 keys unmodified, or with Crit or Ait, but 10 keys with Shift, Shift-Crit of Shift-Ait. Shift way, if an application running leade ERVT receives F27 and decodes that as CRF-2, furth a large - the user actually present CRF-2.											
Number of function keys		decodes that an CHF-S, haft is a bug-the user actually presend CHF-S. Since not elpid seminists appear in be the only ones with this quiet, it might be reasonable for applications to apply it based on "TESFA" enables over" but for less not less a specific capability for it. The current table of lay reporting is a mean. There are many different standards for how function keys and arrow keys get reported.											
		The current state of key reporting is a mess. There are many different standards for how function keys and amow keys get reported. The end goal is CSI wor something like it, but if is not backward compatible enough to use all the time.											
		Into one goal at Chair or sometiming less it, but int not decision companies enough to use at the time. It would be nice to come up with a single spec for function keys, arrow keys, etc. that "just works" with typical settings. That probably means something very much like sterm's defaults, since most of us is and say "ERDM-visions".											
Unified key reporting Unrecognized control sequences are parsed properly		This is a big project that should not block feature reporting v1.											
properly		Paul has some tests in Bortem unit tests, excitet has some too, as I recall. Ten Allen works: Ten Allen works: Ten Allen works:											
		Tim. Also works: Thosp with setting: If the terminal receives, say, an SGR sequence between a character and the next composing character, what it happens? What if a cursor-movement sequence occurs? What if the cursor-movement sequence occurs? What if the cursor-movement sequence moves the cursor to where it sineagy is? What happens when a full-width character is received while the cursor is in the last platf-width column?											
Unicode wide characters, utf-8, etc.													
Unicode wide characters, un-e, etc.													

Context:

Recent discussion — https://github.com/mintty/mintty/issues/881

Older discussion — https://gitlab.freedesktop.org/terminal-wg/specifications/-/issues/8

Query to neovim — https://github.com/neovim/neovim/issues/12260 Query to fish — https://github.com/fish-shell/fish-shell/issues/6984

Query to irssi — https://github.com/irssi/irssi/issues/1190

Query to weechat — https://github.com/weechat/weechat/issues/1495

nosh guide: http://jdebp.eu/Softwares/nosh/guide/

neovim hacks: https://github.com/neovim/neovim/blob/master/src/nvim/tui/tui.c

Spec: https://docs.google.com/document/d/1f8f49lpNrqiimJSYI70SNejRmNsjrY6-Xk2goubf4jl/edit?usp=sharing

Feature	Notes			
88 color mode	Looks like only rxvt has this.			
CSI_GREATER	Modern terminals generally parse csi well enough that these aren't necessary			
CSI_EQUALS	Modern terminals generally parse csi well enough that these aren't necessary			
CSI_POSTFIX_MOD	Modern terminals generally parse csi well enough that these aren't necessary			
DECSET 1049	xterm addition, based on DECSET 49. Clears screen before switching to alternate. Per textshell, this is already ubiquitous among terminals that support an alt screen.			
DECSLPP 0-24	This conflicts with CSI t, which dtterm (and subsequently xterm) used for window & title manipulation which is more useful than DECSLPP.			