

ECMA/TC38-TG3/2015/026 (Rev. 1 – 15 April 2015)

Annex B2 - Product environmental attributes Notebooks and Tablets

The declaration may be published only when all rows and/or fields marked with * are filled-in (n.a. for not applicable). Additional information regarding each item may be found under P15.

Brand *	Lenovo	Logo			
Company name *	Lenovo				
Contact information *	Lenovo Global Environmental Affairs				
e-mail address	Alvin L Carter	Lenovo.			
	alcarter@lenovo.com				
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Additional information The latest version of this document can be found at:					
	http://www.lenovo.com/ecodeclaration				

The company declares (based on product specification or test results based obtained from sample testing), that the product						
conforms to the statemer	conforms to the statements given in this declaration.					
Type of product *	Type of product * Notebook					
Commercial name *	Lenovo V14 Gen 4 AMN					
Model number *	82YT					
Issue date *	2022-12-13					
Intended market *	ntended market * 🛛 🔀 Global 🗌 Europe 🗌 Asia, Pacific & Japan 🗌 Americas 🗌 Other					
Additional information						

This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version.

About Annex B2

Annex B2 reflects Product environmental attributes relevant for Computers and Computer Monitors. The following items from the ECMA-370 Main body are not shown in the template:

P4.1 – P4.3 Consumable materials

P9.1 TEC and Print speed

P10.2 - P10.3 Chemical emissions from printing products

P11.1 - P11.3 Consumable materials for printing products.

Model n	umber *	82YT Logo				
lssue da	ate *	2022-12-13	Leng		тм	
	t environ	mental attributes - Legal requirements	Require		met	
Item			Yes	No	n.a.	
P1		ous substances and preparations				
P1.1*	Products	do comply with current European RoHS Directive. (See legal reference and NOTE B1)	\square			
P1.2*		s do not contain Asbestos (see legal reference). nt: Legal reference has no maximum concentration value.	\square			
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), hydrobromofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1- trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum concentration values.					
P1.4*	Products do not contain more than; 0,005% polychlorinated biphenyl (PCB), 0,005% polychlorinated terphenyl (PCT) in preparations (see legal reference).					
P1.5*		do not contain more than 0,1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the ntaining at least 48% per mass of chlorine in the SCCP (see legal reference).	ie 🔀			
P1.6*	(see leg	th direct and prolonged skin contact do not release nickel in concentrations above 0,5 μg/cm²/wee al reference). nt: Max limit in legal reference when tested according to EN1811:2011-5.	k 🔀			
P1.7*		Article 33 information about substances in articles is available at (add URL or mail contact): www.lenovo.com/us/en/Lenovo-REACH-SVHC-Disclosure	\boxtimes			
P2	Batterie	S	·			
P2.1*		oduct contains a battery or an accumulator, the battery/accumulator is labeled with the disposal Information on proper disposal is provided in user manual. (See legal reference)	\boxtimes			
P2.2*		s or accumulators do not contain more than 0,0005% of mercury or 0,002% of cadmium. (See lega	al 🔀			
P2.3*	Batteries	and accumulators are readily removable. (See legal reference)	\boxtimes			
P3	Conform	nity verification & Eco design (ErP)		<u> </u>		
P3.1*	The proo The Dec https://v	Juct is CE-marked to show conformance with applicable legal requirements (see legal reference). Jaration of Conformity can be requested at (add link or e-mail address): www.lenovo.com/us/en/compliance/eu-doc for EU; www.lenovo.com/us/en/compliance/uk-doc for UK				
P3.2*		duct complies with the Eco design requirements for energy-related products,	\boxtimes			
	Require	al reference). I information is;				
		vww.lenovo.com/us/en/compliance/eco-declaration				
P5		packaging				
P5.1*	hexaval	ng and packaging components do not contain more than 0,01% lead, mercury, cadmium an ent chromium by weight of these together.				
P5.2*	used (se	kaging materials are marked with abbreviations and numbers indicating the nature of the material(e legal reference).				
P5.3*	The proc (see leg	luct packaging material is free from ozone depleting substances as specified in the Montreal Protoc al reference). nt: Legal reference has no maximum concentration values.	ol 🔀			
P6		nt information				
-		on for recyclers/treatment facilities is available (see legal reference).		_		

NOTE B1 Restriction applies to the homogeneous material, unless other specified and expressed in weight %. Stating "Yes" means that the product is compliant with the mandatory requirements.

Model number *		82YT	Logo			
Issue da	te *	2022-12-13		Leng		
Product		mental attributes - Market requirements (See General NOTE GN	below)	.		
Item		onmental conscious design tory to fill in. Additional information regarding each item may be found under P14.		Requirer Yes	nent m No	n.
nom	-manua			103	NO	a.
P7		Disassembly, recycling				
P7.1*		t have to be treated separately are easily separable		\square		
P7.2*		naterials in covers/housing have no surface coating.			\square	
P7.3*	Plastic parts > 100 g consist of one material or of easily separable materials.					
P7.4*	•	arts > 25 g have material codes according to ISO 11469 referring ISO 1043-4.		\square		
P7.5		arts are free from metal inlays or have inlays that can be removed with commonly a	vailable tools.	\square		
P7.6*	Labels a	re easily separable. (This requirement does not apply to safety/regulatory labels).				
	Product					
P7.7*	10	ng can be done e.g. with processor, memory, cards or drives				
P7.8*		ng can be done using commonly available tools		\square		
P7.9		arts are available after end of production for: 3 years				
P7.10		s available after end of production for: 5 years				
D7.44*		and substance requirements				
P7.11*		cover/housing material type (e.g. plastics, metal, aluminum): type: PC+ABS Material type: SGCC				
P7.12		type: PC+ABS Material type: SGCC n materials of external electrical cables are PVC free.			\square	
P7.13		n materials of internal electrical cables are PVC free.		<u> </u>		
P7.14		plastic casing/cover parts > 25 g contain no more than 0,1% weight (1000 ppm) b	romine and 0.1	% ⊠		
1 7.14	weight (´ polyvinyl	1000 ppm) chlorine attributable to brominated flame retardants, chlorinated flame chloride or 0,3% weight (3000 ppm) bromine and 0,3% weight (3000 ppm) chlorine in n 25% post-consumer recycled content.	e retardants, ar	d		
P7.15		ircuit boards, PCBs (without components) are low halogen: all ⊠ PCBs > 25 g _ ed in IEC 61249-2-21. (See 1NOTE B2)	are low haloge	n	\square	
P7.16	Flame re Marking:	tarded plastic parts > 25 g in covers / housings are marked according ISO 1043-4:		\square		
P7.17		nemical specifications of flame retardants in printed circuit boards > 25 g (without co	omponents):]
	TBBF	PA (additive), TBBPA (reactive) (See NOTE B3), Other: , CAS #:		\boxtimes		
		nemical specifications of flame retardants in printed circuit boards (without compone g ISO 1043-4:	ents) > 25 g			
P7.18		etarded plastic parts >25g contain the following flame retardant substances ations above 0.1%:	s/preparations	in 🔀		
	2. Chemi 3. Chemi	ical name: <i>Oligomeric phosphorous compound</i> CAS #: ical name: CAS #: ical name: CAS #: ical name: , CAS #:				
	Chemica	I specifications of flame retardants in plastic parts >25g according ISO 1043-4:				
P7.19	assigned the following Risk phrases; and Hazard statements: H411;H413 The source(s) for these classifications is/are found at (add URL(s)): European Council Directive					
P7.20*	67/548/EEC , (See note B5) Postconsumer recycled plastic material content is used in the product (See Note B6):					
11.20	lfYES;a a) Oft ape or	t least one of the two alternatives below shall be answered; otal plastic parts' weight > 25 g, the postconsumer recycled plastic material conten ercentage of total plastic by weight) is 2.44%.	t (calculated as			

GENERAL NOTE Standard references should direct to the latest version of a standard. If an older version of a standard is used, section P15 shall be used for explanation.

NOTE B2 IEC 61249-2-21 defines maximum limits of 900 ppm for each of the substances chlorine and bromine and a maximum limit of 1500ppm of these substances combined. The standard does not address fluorine, iodine and astatine which are included in the group of halogens.

NOTE B3 and B4 A Guidance document on Chemical substances is available; see http://www.ecma-international.org/publications/standards/Ecma-370.htm

NOTE B5 If a certain substance has been assigned a certain risk phrases / hazard statement in the referenced source, this does not necessarily mean the substance has been tested for all of the hazards referred to by a certain customer.

NOTE B6 Applies to a product containing plastic parts whose combined weight exceeds 100 g with the exception of printed circuit boards, cables, connectors and electronic components and bio-based plastic material.

Model number * 82YT				Logo	Lonovo	
Issue date * 2022-1	2-13				Lenovo	тн
Product environmental	attributes - Market I	requirements (cont	inued)		Requirement	met
Item					Yes No	n.a.
	ostance requirements					
P7.21* Biobased plastic	material content is use	d in the product (See N	NOTE B7):			
 If YES; at least one of the two alternatives below shall be answered; a) Of total plastic parts' weight > 25 g, the biobased plastic material content (calculated as a percentage of total plastic by weight) is 0 %. or 						
	of the biobased plastic free from mercury, i.e.					
	d specify: Number of la		num mercury content p	er lamp: mg		
P8 Batteries			· · · ·	· · ·		
	composition: LI-ION P	olymer battery				
	ption (See NOTE B8) ne following power leve	la ar anargy concurrent	iono oro roportad:			
Energy mode *	Power level at	Power level at	Power level at	Reference/Stand	dard for energy	
	100 V AC	115 V AC	230 V AC	modes and test		
Peak (On-max)	65 W	65 W	65 W	Full load		
Category 1						
Short Idle State - WOL Enabled	5.04 W	4.94 W	5.14 W	ENERGY STAR	Computer V8	
Long Idle State - WOL Enabled	1.09 W	1.1 W	1.12 W	ENERGY STAR	Computer V8	
Sleep (S3) - WOL Enabled	1.09 W	1.1 W	1.12 W	ENERGY STAR	Computer V8	
Off (S5) - WOL Disabled	0.42 W	0.40 W	0.42 W	ENERGY STAR	Computer V8	
EPS No-load (External power supply / charger plugged in the wall outlet but disconnected from the product.)	e 0.067 W	0.068 W	0.070 W			
ETEC * Annual Energy Consumption	18.47kWh/year	18.20kWh/year	18.85kWh/year	$E_{TEC} = (8760/100) + P_{sleep} \times 0.35 + P_{short \ Idle} \times 0.30)$	Plong Idle X 0.10+	
	Poff: Off Mode(S5) - W	OL Enabled; P _{sleep} : Slee	p Mode(S3) - WOL Enab	led; P _{idle} : Idle State -	WOL Enabled	
Category 2						
Short Idle State - WOL Enabled	5.06 W	5.18 W	5.23 W	ENERGY STAR	Computer V8	
Long Idle State - WOL Enabled	1.11 W	1.13 W	1.17 W	ENERGY STAR	Computer V8	
Sleep (S3) - WOL Enabled	1.11 W	1.13 W	1.17 W	ENERGY STAR	Computer V8	
Off (S5) - WOL Disabled	0.44 W	0.43 W	0.45 W	ENERGY STAR	Computer V8	
EPS No-load (External power supply / charger plugged in the wall outlet but disconnected from the product.)		0.068 W	0.070 W			
PTEC *	W	W	W			\boxtimes
Typical Energy Consumption ETEC * Annual Energy Consumption	18.61 kWh/year	19.01 kWh/year	19.34 kWh/year		00) x (P _{off} x 0.25 P _{long_ldle} x 0.10+	
	Poff: Off Mode(S5) - WOL Enabled; Psleep: Sleep Mode(S3) - WOL Enabled; Psleep Mode(S3) - WOL Enabled; Psleep					

NOTE B7 The following is to be excluded from the calculation of percentage: printed circuit boards, labels, cables, connectors and electronic components and postconsumer recycled plastic

NOTE B8 A Guidance document on Energy Efficiency is available; see <u>http://www.ecma-international.org/publications/standards/Ecma-370.htm</u>

NOTE B9 A Guidance document on Acoustic Noise is available; see http://www.ecma-international.org/publications/standards/Ecma-370.htm

External	External Power Supply Efficiency Level (International Efficiency Marking Protocol) *: VI								
Display r	Display resolution * : 2.07 megapixels								
Default ti	me to enter energ	y save mode: 5 minutes							
P9.2*	Information ab	out the energy save function is provided with the p	roduct.						
P9.3	Energy efficien	cy class (monitors only):							
P10	Emissions			• • • • •					
	Noise emissio	on – Declared according to ISO 9296 (See NOTE I	39)						
P10.1	Mode	Mode Mode description		Statistical upper limit A-weighted sound power level, L _{WA,c} (B)					
	Idle	* Idle	* 2.2						
	Operation	* Operation	* 3.9						
	Other mode	$\label{eq:large} \begin{array}{ c c c } \hline \mbox{Declared A-weighted sound pressure level (dB) } L_{p\rm Am} \\ \hline \mbox{Declared A-weighted sound pressure level (dB) } L_{p\rm Am} \\ \hline \end{array}$	15.7 (operator positi	on desktop – idle)					
	on desktop – operating)								
	Measured according to: 🔀 ISO 7779 🗌 ECMA-74								
		Other (only if not covered by E	ECMA-74)						

Model nu	umber *	82YT		-	Logo			
Issue dat	te *	2022-12-13				Lenc	VO _w	
Product	environ	nental attribu	tes - Market requirements (co	ntinued)		Require	ment me	
Item						Yes	No n.a	
		nagnetic emiss				•		
P10.4	program	(s): MPR-II(3 pii	the requirement for low frequency en AC adapter only)	electromagnetic field	s of the following vol	untary 🔀		
P12	Ergono	mics for compu	ting products					
P12.1*			gonomic requirements of ISO 9241					
P12.2*	The phy	sical input device	e meets the requirements of ISO 99	95 and ISO 9241-41	0.	\square		
P13	Packagi	ing and docume	entation					
P13.1*	Product Product Product Product Product	Product packaging material type(s): Corrugated Fiberboard weight (kg): 0.296 Product packaging material type(s): paper(manual) weight (kg): 0.0049 Product packaging material type(s): ACC box weight (kg): 0.037 Product packaging material type(s): EPE weight (kg): 0.072 Product packaging material type(s): PE weight (kg): 0.0139 Product packaging material type(s): PET weight (kg): 0.0129 Product packaging material type(s): PET weight (kg): 0.0129						
P13.2*	Product	plastic primary p	ackaging is free from PVC.			\square		
P13.3*		duct primary cor er recovered fibe	rugated fiberboard packaging, spe r content: 82 %	cify the contained	percentage of minim			
P13.4*		media for user a ic 🔀, Paper 🔀	nd product documentation (tick box) , Other	:				
P13.5	Úser an		is item if paper documentation used entation on paper media is chlorine					
	Totally c	hlorine-free				\boxtimes		
	Element	al chlorine-free						
	Processed chlorine-free							
P14	Volunta	ry programs					· · · ·	
P14.1			equirements of the following volunta	rv program(s):				
	ENERG	Y STAR® el: EPEAT	Criteria version: <i>8.0</i> Criteria version: <i>1680.1-2018</i> Criteria version:	Date: 2020/7/15 Date: Date:	Product category: Product category: Product category:	1,2		
P15			(See NOTE B10)	·	· · · · ·			
P 9			f specific configuration may vary					
	the info supplie informa	rmation contair r's knowledge a tion. The inforn	no representations, guarantees, ned in this document. All informat vailable at the time of completion nation provided here is approxima e for more information.	tion provided by su n, and supplier sha	pplier in this docur Il have no obligation	ment is provided n to update such	based on	
P9	See Ene	ergy Star Qualif	ied Notebooks & Tablet Compute		See Energy Star Qualified Notebooks & Tablet Computers for the latest information: http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=0			

NOTE B10 Additional lines may be inserted to declare further items, by positioning the cursor at the far right of the row and hitting the <Enter> key.

Legal references Europe Annex B2

Reference	Declaration item
Directive 2011/65/EU (RoHS Directive) * * Specific exemptions apply for certain products and applications.	P1.1
Regulation (EC) 1907/2006(REACH, Annex XVII	P1.2, P1.4, P1.6, P1.7
Regulation (EC) 2037/2000, 2038/2000, 2039/2000 (Marketing and use of Ozone layer depleting substances)	P1.3, P5.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
Directive 2013/56/EC (Battery and accumulators Directive) * * These provisions shall not apply where, for safety, performance, medical or data integrity reasons, continuity of power supply is necessary and requires a permanent connection between the appliance and the battery or accumulator.	P2.1, P2.2, P2,3, P8.1
Directive 2006/95/EC (Low Voltage Directive)	P3.1
Directive 2004/108/EC (EMC Directive)	P3.1
Directive 1999/5/EC (R&TTE Directive)	P3.1
Regulation (EC) 801/2013 amending Regulation (EC) No 1275/2008 with regard to ecodesign requirements for standby, off mode electric power consumption of electrical and electronic household and office equipment, and amending Regulation (EC) No 642/2009 with regard to ecodesign requirements for televisions	P3.1, P3.2
Regulation (EC) No 1272/2008 (CLP Regulation)	P7.19
Directive 2004/12/EC (Packaging Directive)	P5.1
Decision 97/129/EC (Secondary packaging legislation)	P5.2
Directive 2012/19/EU (WEEE directive)	P6.1

Lenovo ErP Lot3 Information Sheet - PC / Notebook -

As required by COMMISSION REGULATION (EU) No 617/2013 of 26 June 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for computers and computer servers (ErP Lot3).

Products scope of this sheet:

Desktop computer, integrated desktop computer, and notebook computer

This document is only valid in connection with the IT Eco Declaration of the specific Product.

Commercial name	Lenovo V14 Gen 4 AMN	Logo
Model number *	82YT	
Issue date *	2022-12-13	Lenovo
Additional information		

P7.1.1	Product environmental attributes								
(d)	Year of manufacture:				2022				
(e)	Etec value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics cards (dGfx) are disabled and if the system is tested with switchable graphics mode with UMA driving the display.								
(f)	Etec value (kWh) per ErP Lot 3 Category and capability adjustments applied when all discrete graphics cards (dGfx) are enable								
	Category A (according to ErP Lot 3)Category B (according to ErP Lot 3)Category C (according to ErP Lot 3)Category D (according to ErP Lot 3)								
	Memory over base [GB]	16							
nents sting	Additional internal storage	No (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)				
capability adjustments applied during testing	Discrete television tuner	<mark>No</mark> (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)				
ability ; blied dt	Discrete Audio Card	<mark>No</mark> (Yes / No)	(Yes / No)	(Yes / No)	(Yes / No)				
cap app	Discrete graphics Card(s) [number / #]	No #: (Yes / No)	#: (Yes / No)	#: (Yes / No)	#: (Yes / No)				
	Category of discrete graphics Card(s)								
Test results	Etec Value (kWh) - dGfx disabled all discrete graphics cards (dGfx) are disabled/ UMA is active for switchable graphics/ product has no graphics cards (dGfx)	11.22							
Test r	Etec Value (kWh) - dGfx enabled all discrete graphics cards (dGfx) are enabled								
(g)	Idle state power demand (Watts);				2.98				
(h)	Sleep mode power demand (Watts);				1.17				
(i)	Sleep mode with WOL enabled power de	emand (Watts) (where	enabled);		1.17				
(j)	Off mode power demand (Watts);				0.45				
(k)	Off mode with WOL enabled power dem	and (Watts) (where en	abled);		0.45				
(I)	Internal power supply efficiency at 10 %,	, 20 %, 50 % and 100 °	% of rated output pow	er (if applicable):					
	10% 20% 50%	100% Avera	age						
(m)	External power supply efficiency (if appli	cable)*:							
	Average active efficiency: 90.67%; 89.5	56%;91.83%;91.18%;8	89.63%;91.85%;89.71	%					
(o)	*internal note: show values for all available external power supplies Minimum number of loading cycles that the batteries can withstand (applies only to notebook computers): 300CYCLES								
(p-1)	Measurement methodology used to determine information mentioned in points (I) – internal PSU efficiency: NA								
(p-2)	Measurement methodology used to determine information mentioned in points (m) – external PSU efficiency: EN 50563:2011 measurement methodology								

(p-3)	b-3) Measurement methodology used to determine information mentioned in points (o) – loading cycles batteries: EN 50563:2011 measurement methodology					
(p-4)		dology used to determine information mentioned in r Point P9.1 in the Product IT Eco Declaration:	naximum, idle, sleep, off mode			
		EN 62623:2013 measurement methodo	blogy			
(q)	Sequence of steps for	or achieving a stable condition with respect to power	demand::			
		EN 62623:2013 measurement methodo	blogy			
(r)	Description of how s	leep and/or off mode was selected or programmed:				
		EN 62623:2013 measurement methodo	blogy			
(s)	Sequence of events off mode:	required to reach the mode where the equipment au	tomatically changes to sleep and/or			
	rel	fer to power management, 5mins automatically re	eaches sleep mode			
(t)		te condition before the computer automatically re s not exceed the applicable power demand requirement		5		
(u)		r a period of user inactivity in which the compute wer power demand requirement than sleep mode (in		NA		
(v) (w)		ore the display sleep mode is set to activate after nergy-saving potential of power management functio		5		
		lescribed in User Guide and Power Manager unde programs				
(x)	User information on	how to enable the power management functionality:				
	User information a	lescribed in User Guide and Power Manager unde programs	er Lenovo V14 G4 AMN menu in all			
(z)		measurements: — test voltage in V and frequency in system, — information and documentation on the in sting:				
		230V, 50GHz, Total Harmonic Distortion	n <2 %			
Addition	nal Notebook Batter		Detter fieel user replaceshie	<i>n/a</i>		
		Battery[ies] <u>not</u> user replaceable The battery[ies] in this product cannot be easily	Battery[ies] user replaceable	n/a		
		replaced by users themselves. ¹⁾				
Internal/	built-in Battery					
External	/detachable Battery			\square		
Bios Bao	ckup Battery					
Other:						
Addition	al information					
)						
кумулаторна	ата[ите] батерия[и] в този п	asily replaced by users themselves. родукт не може да се замени[ят] лесно от самите потребител разлитијас fesilizante part la presieg usuarios	пи.			
ýměnu bateri	ie/baterií v tomto výrobku by	ser sustituidas fácilmente por los propios usuarios. neměli provádět sami uživatelé. tteriet/batterierne i dette produkt.				
er Akku/die A		können nicht ohne weiteres vom Benutzer selbst ausgetauscht w	verden.			
μπαταρία[-ε	ς] στο προϊόν αυτό δεν μπορ	ούν να αντικατασταθούν εύκολα από τους ίδιους τους χρήστες uit ne peuvent être facilement remplacée(s) par les utilisateurs eu	ıx-mêmes.			
orisnik ne mo	ože lako zamijeniti Bateriju sa					
ietotāji paši n	nevar nomainīt šā ražojuma a aterijos [bateriju] pats vartoto	akumulatoru(-us).				
termék akku	imulátorát/akkumulátorait a f	/jistgħux tiġi/jiġu sostitwita/i mill-utenti stess.				
atteriet [ene]	i dette produktet kan ikke let					
żytkownik nie	e może sam w łatwy sposób	wymienić baterii w tym produkcie. ser facilmente substituídas pelos próprios utilizadores.				
		e (pot) fi usor înlocuită (înlocuite) de utilizatorii înșiși.				

Bateria (bateriile) din acest produs nu poate (pot) fi uşor înlocuită (înlocuite Batériu(-ie) v tomto výrobku nemôže vymieňať používateľ. Baterij/baterije v tem izdelku uporabniki sami ne morejo zlahka zamenjati.

Tämän tuotteen akku [akut] ei[vät] ole helposti käyttäjän vaihdettavissa. Det är inte enkelt för kunden att själv byta ut batteriet/batterierna. Bu üründeki batarya(lar) kullanıcılar tarafından kolaylıkla değiştirilemez.